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L1           68 SEA FILE=HCAPLUS ("KAUSHANSKY K"/AU OR "KAUSHANSKY KEN"/A
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L3          808 SEA FILE=HCAPLUS ( 9014-42-0 OR THROMBOPOIETIN OR TPO)/IA
                ,IT,ST
L4         5579 SEA FILE=HCAPLUS ( 11096-26-7 OR  ERYTHROPOIETIN# OR EPO)
                /IA,IT,ST
L5           62 SEA FILE=HCAPLUS L3 AND L4
L6           57 SEA FILE=HCAPLUS L5 NOT L1
L7        11613 SEA FILE=HCAPLUS (HEMATOPOIESIS OR ERYTHROPOIESIS)/IA,IT,
                ST
L8           24 SEA FILE=HCAPLUS L6 AND L7
L9           24 SOR L8 PY


L9   ANSWER 1 OF 24  HCAPLUS  COPYRIGHT 1996 ACS
AN   1976:587069  HCAPLUS
DN   85:187069
TI   Relations between thrombopoiesis and erythropoiesis: with
     studies of the effects of preparations of thrombopoietin
     and erythropoietin
AU   Evatt, Bruce L.; Spivak, Jerry L.; Levin, Jack
CS   Sch. Med. Hosp., Johns Hopkins Univ., Baltimore, Md., USA
SO   Blood (1976), 48(4), 547-58
     CODEN: BLOOAW
DT   Journal
LA   English
AB   The effects of administration of partially puriied human urinary
   erythropoietin [11096-26-7] and rabbit
   thrombopoietin [9014-42-0], and of endogenously
     produced erythropoietin and thrombopoietin on
     both red cell and platelet prodn. were examd. in mice.  Prepns. of
   thrombopoietin and partially purified human urinary
   erythropoietin were administered s.c. to normal mice, and
     the rate of incorporation of selenomethionine-75Se into platelets
     was measured as an index of thrombopoietic activity of the infused
     material.  Erythropoietin and thrombopoietin
     were assayed for erythropoietic activity by measuring the rate of
     appearance of 59Fe in the red cells of posthypoxic polycythemic
     mice.  Prepns. contg. thrombopoietin had barely measurable
     erythropoietic activity, and 7 units of partially purified
   erythropoietin had little thrombopoietic activity.  When
     endogenous levels of erythropoietin were increased by
     hypoxia, platelet prodn. was not enhanced.  Similarly, increased
     levels of thrombopoietin, induced in response to
     thrombocytopenia produced by platelet antiserum, did not alter red
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cell prodn. Apparently, physiol. increased levels of **thrombopoietin** do not stimulate **erythropoiesis** and physiol. increased levels of **erythropoietin** do not stimulate thrombopoiesis.

IT **9014-42-0**
RL: BIOL (Biological study)
(blood platelet and erythrocyte formationin relation to)

IT **11096-26-7**
RL: BIOL (Biological study)
(blood platelet formation in relation to)

L9 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1978:594512 HCAPLUS
DN 89:194512
TI The in vitro production of **erythropoietin** and **thrombopoietin**
AU Ogle, Jane W.; Dunn, C. D. R.; McDonald, T. P.; Lange, R. D.
CS Cent. Health Sci., Univ. Tennessee Mem. Res. Cent., Knoxville, Tenn., USA
SO Scand. J. Haematol. (1978), 21(3), 188-96
CODEN: SJHAAQ; ISSN: 0036-553X
DT Journal
LA English
AB The contents of the presumptive humoral regulators of **hematopoiesis**, **thrombopoietin**, **erythropoietin**, and erythrogenin, were detd. in supernatant fluids from culture lines of fetal mouse liver, fetal and adult bovine kidney, and adult rabbit kidney cells. Hormone prodn. varied markedly from 1 culture to another, confirming other studies that the optimal culture conditions for the generation of hematol. active hormones have not been delineated. The lack of any discernable relation between the prodn. of **thrombopoietin** and **erythropoietin**, **thrombopoietin** and erythrogenin, or **erythropoietin** and erythrogenin suggested that these materials represent 3 distinct entities.

IT **9014-42-0 11096-26-7**
RL: FORM (Formation, nonpreparative)
(formation of, by kidney and liver cultures)

L9 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1985:1081 HCAPLUS
DN 102:1081
TI The role of **erythropoietin**, thrombopoietic stimulating factor, and myeloid colony-stimulating factors on murine megakaryocyte colony formation
AU Williams, Neil; Jackson, Heather; Iscove, Norman N.; Dukes, Peter P.
CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia
SO Exp. Hematol. (N. Y.) (1984), 12(9), 734-40
CODEN: EXHMA6; ISSN: 0301-472X
DT Journal
LA English
AB Various growth factors including purified **erythropoietin** [**11096-26-7**], colony-stimulating factor-1 (CSF-1) [81627-83-0], and granulocyte-macrophage colony-stimulating factor (CSF) [83869-56-1] were tested for their ability to stimulate megakaryocytopoiesis. Four sep. prepns. of **erythropoietin** were tested in highly defined cell culture medium. One unit of

purified material stimulated small but significant nos. of megakaryocyte colonies, both in serum-contg. and in serum-free cultures. All other **erythropoietin** prepns. failed to induce megakaryocyte colony formation. Purified **erythropoietin** showed no synergistic activity with either WEHI-3 cell conditioned medium (WEHI-3CM, a source of both megakaryocyte CSF and megakaryocyte-potentiating activity) or P388D1 cell conditioned medium (P388D1CM, a prepn. contg. megakaryocyte potentiator). Partially purified thrombopoietic stimulatory factor [**9014-42-0**] did not stimulate directly megakaryocyte colony formation, but acted together with WEHI-3CM, augmenting the no. of clonable progenitors detected. Optimal activity was obsd. at 12-25 .mu.g protein per plate. Myeloid growth factors (CSF-1 and GM-CSF) were inactive in the murine megakaryocyte assay. The data show lineage specificity for the myeloid stimulators, but a purified **erythropoietin** prepn. does stimulate a small level of megakaryocytopoiesis.

IT **9014-42-0 11096-26-7**
RL: BIOL (Biological study)
(megakaryocytopoiesis response to)

L9 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1987:596239 HCAPLUS
DN 107:196239
TI The role of **erythropoietin**, megakaryocyte colony-stimulating factor, and T-cell-derived factors on human megakaryocyte colony formation: evidence for T-cell-mediated and T-cell-independent stem cell proliferation
AU Geissler, Dietmar; Konwalinka, Guenther; Peschel, Christian; Braunsteiner, Herbert
CS Clin. Intern. Med., Univ. Innsbruck, Innsbruck, A-6020, Austria
SO Exp. Hematol. (N. Y.) (1987), 15(8), 845-53
CODEN: EXHMA6; ISSN: 0301-472X
DT Journal
LA English
AB Recent studies suggest that megakaryocytopoiesis is governed by a dual-level regulatory process, with megakaryocyte colony-stimulating factor (Meg-CSF) primarily influencing proliferation of the committed precursors and **thrombopoietin** required for megakaryocyte ploidy amplification and for maturation. The authors have examd. different sources of Meg-CSF in a microagar culture system with a view to their capacity to enhance megakaryocyte colony formation directly or via an indirect T-lymphocyte- or monocyte-mediated effect. The comparative influences of PHA-stimulated leukocyte-conditioned medium (PHA-LCM), **erythropoietin** (**Epo**), sera of patients with severe aplastic anemia, and direct PHA addn. to the culture were evaluated for their capacity to enhance megakaryocytic colony formation as well as for the maturation rate of megakaryocytes (Mk) grown in the microagar culture system. Each treatment by itself enhanced colony formation from unseparated low-d. cells. Removal of T-lymphocytes and monocytes from the bone marrow sample caused a cessation of the enhancing effect of direct PHA addn. to cultures stimulated with **Epo**, but did not influence the enhancing activities of severe aplastic anemia serum (SAA, contg. Meg-CSF and **thrombopoietin**), PHA-LCM, and **Epo**. SAA serum, **Epo**, and PHA-LCM induced Mk colony formation directly and

therefore may act via a common mechanism. Differences were obsd. concerning their colony-stimulating potency and their influence on the Mk maturation rate.

IT **9014-42-0**, **Thrombopoietin 11096-26-7**, **Erythropoietin**
RL: BIOL (Biological study)
(megakaryocyte colony formation response to human, T-lymphocyte-dependent and -independent effects in)

L9 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1987:490874 HCAPLUS
DN 107:90874
TI High doses of recombinant **erythropoietin** stimulate platelet production in mice
AU McDonald, T. P.; Cottrell, Marilyn B.; Clift, Rose E.; Cullen, W. C.; Lin, F. K.
CS Coll. Vet. Med., Univ. Tennessee, Knoxville, TN, USA
SO Exp. Hematol. (N. Y.) (1987), 15(6), 719-21
CODEN: EXHMA6; ISSN: 0301-472X
DT Journal
LA English
AB To test the hypothesis that recombinant **erythropoietin** (rEpo) would stimulate platelet prodn. in mice, both normal mice and mice in rebound-thrombocytosis were injected with rEpo and the percent 35S incorporation into platelets was measured. A thrombocytopoiesis-stimulating factor (TSF or **thrombopoietin**) was used as a pos. control. The rEpo increased isotopic incorporation into platelets of both normal mice and mice in rebound-thrombocytosis, as did TSF, but required large doses (15 unit (U) rEpo/mouse). In other mice, hematocrits, platelet counts, platelet sizes, and 24-h percent 35S incorporation into platelets were measured 2 days after injection of 2 equally divided doses of either rEpo or TSF. Increases in both platelet sizes and percent 35S incorporation into platelets were found after injections of 15 U rEpo/mouse or 2.3 U TSF/mouse. The rEpo, at high doses, stimulates platelet prodn. in mice. Mol. similarities between rEpo and TSF and their ability to compete for common receptor sites on megakaryocytes and their progenitor cells are also examd.
IT **11096-26-7**, **Erythropoietin**
RL: BIOL (Biological study)
(blood platelet formation stimulation by)
IT **9014-42-0**
RL: BIOL (Biological study)
(blood platelet formation stimulation by, **erythropoietin** in relation to)

L9 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1988:628304 HCAPLUS
DN 109:228304
TI Effect of recombinant and purified human hematopoietic growth factors on in vitro colony formation by enriched populations of human megakaryocyte progenitor cells
AU Lu, Li; Briddell, Robert A.; Graham, Cathy D.; Brandt, John E.; Bruno, Edward; Hoffman, Ronald
CS Sch. Med., Indiana Univ., Indianapolis, IN, USA
SO Br. J. Haematol. (1988), 70(2), 149-56
CODEN: BJHEAL; ISSN: 0007-1048

DT Journal
LA English
AB The effect of purified or recombinant human hematopoietic growth factors including **erythropoietin** (**Epo**), thrombocytopoiesis stimulating factor (TSF), interleukin 1.alpha. (IL-1.alpha.), granulocyte colony stimulating factor (G-CSF), granulocyte-macrophage colony stimulating factor (GM-CSF), macrophage colony stimulating factor (M-CSF or CSF-1) and interleukin-3 (IL-3) on megakaryocyte (MK) colony formation by My10+++DR+ cells was detd. utilizing a serum depleted assay system. Neither **Epo**, TSF, CSF-1, IL-1.alpha. nor G-CSF alone augmented MK colony formation above baseline. In contrast, the addn. of GM-CSF and IL-3 each increased both CFU-MK colony formation and the size of colonies with maximal stimulation occurring following the addn. of 200 units/mL of IL-3 had a greater ability to promote megakaryocyte colony formation than GM-CSF. The stimulatory effects of GM-CSF and IL-3 were also additive. The CFU-MK appears, therefore, to express HPCA-1 and HLA-DR antigens. These studies also indicate that GM-CSF and IL-3 are important in vitro regulators of megakaryocytopoiesis, and that these growth factors are not dependent on the presence of large nos. of macrophages or T cells for their activity since the My10+++DR+ cells are largely devoid of these accessory cells.
IT **9014-42-0**, Thrombocytopoiesis-stimulating factor
11096-26-7, **Erythropoietin**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(promegakaryocyte response to)

L9 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1988:628224 HCAPLUS
DN 109:228224
TI Effects of hematopoietic growth factors on in vitro colony formation by human megakaryocyte progenitor cells
AU Lu, L.; Bruno, E.; Briddell, R. A.; Graham, C. D.; Brandt, J. E.; Hoffman, R.
CS Sch. Med., Indiana Univ., Indianapolis, IN, 46223, USA
SO Behring Inst. Mitt. (1988), 83, 181-7
CODEN: BHIMA2; ISSN: 0301-0457
DT Journal
LA English
AB In order to study the effects of recombinant and purified hematopoietic growth factors on megakaryocyte (MK) progenitor cells (CFU-MK), enriched populations of human CFU-MK were isolated utilizing fluorescence activated cell sorting after labeling of cells with monoclonal antibodies. The effects of natural or recombinant human hematopoietic growth factors including **erythropoietin** (**Epo**), thrombocytopoiesis stimulating factor (TSF), interleukin 1.alpha. (IL-1.alpha.), granulocyte colony stimulating factor (G-CSF), granulocyte-macrophage colony stimulating factor (GM-CSF), macrophage colony stimulating factor (CSF-1), and interleukin 3 (IL-3) on MK colony formation by My10+++DR+ cells were detd. utilizing a defined medium assay system. Neither **Epo**, TSF, CSF-1, IL-1.alpha. nor G-CSF alone augmented MK colony formation above baseline. By contrast, the addn. of GM-CSF and IL-3 each increased CFU-MK colony formation with maximal stimulation occurring following the addn. of

200 units/mL of IL-3 and 100 units/mL of GM-CSF. At maximal concn., IL-3 had a greater ability to promote megakaryocyte colony formation than GM-CSF.

IT **9014-42-0 11096-26-7, Erythropoietin**
RL: BIOL (Biological study)
(megakaryocyte progenitor colony formation response to)

L9 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1988:216987 HCAPLUS
DN 108:216987
TI The role of purified and recombinant hematopoietic growth factors in the regulation of various stages of human megakaryocytopoiesis
AU Hoffman, Ronald; Stravena, John; Lu, Li; Roth, Bruce; Bruno, Edward; Briddell, Robert
CS Sch. Med., Indiana Univ., Indianapolis, IN, USA
SO Soc. Gen. Physiol. Ser. (1988), 43(Cell Physiol. Blood), 67-78
CODEN: SGPHAW; ISSN: 0094-7733
DT Journal
LA English
AB The effects of purified and recombinant hematopoietic growth factors on human megakaryocytopoiesis are described. Megakaryocyte colony formation was stimulated by purified rat interleukin-3 (rIL-3) and rat granulocyte-macrophage colony-stimulating factor (rGM-CSF); however, recombinant **erythropoietin**, recombinant granulocyte colony-stimulating factor, macrophage colony-stimulating factor, and recombinant interleukin 1.alpha. had no effect. The rIL-3 and rGM-CSF also stimulated colony formation by highly purified megakaryocyte progenitor cells and their effects were additive. Terminal cytoplasmic maturation to normal human megakaryocytes was induced by both thrombocytopoietic stimulating factor and **erythropoietin**. The roles of megakaryocyte-stimulating factor, megakaryocyte-maturation factor, megakaryocyte colony-stimulating factor, and substances inhibitory to progenitor proliferation and terminal cytoplasmic maturation in megakaryocytes are also discussed.
IT **9014-42-0**, Thrombocytopoietic stimulating factor
RL: BIOL (Biological study)
(megakaryocyte differentiation and proliferation regulation by, in human)
IT **11096-26-7, Erythropoietin**
RL: BIOL (Biological study)
(megakaryocyte terminal differentiation induction by, in human)

L9 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1989:630404 HCAPLUS
DN 111:230404
TI Effect of interleukin 6 on in vitro human megakaryocytopoiesis: its interaction with other cytokines
AU Bruno, Edward; Hoffman, Ronald
CS Sch. Med., Indiana Univ., Indianapolis, IN, 46223, USA
SO Exp. Hematol. (N. Y.) (1989), 17(10), 1038-43
CODEN: EXHMA6; ISSN: 0301-472X
DT Journal
LA English
AB The effects of human recombinant interleukin 6 (rIL-6) on in vitro human megakaryocytopoiesis were studied utilizing a serum-depleted culture system. Recombinant IL-6 increased both the no. of

megakaryocyte (MK) colonies formed and the no. of cells comprising individual MK colonies cloned from normal low-d. bone marrow (LDBM) cells. This stimulation of MK colony no. and size was less than that obsd. following the addn. of recombinant interleukin 3 (rIL-3) or granulocyte-macrophage colony-stimulating factor (rGM-CSF). The addn. of either rIL-3 or rGM-CSF, but not rIL-6, promoted MK colony formation by nonadherent, low-d., T-cell-depleted (NALDT-) marrow cells. Recombinant interleukin 1.alpha. (rIL-1.alpha.) and interleukin 4 (rIL-4) failed either to promote LDBM MK colony formation when added alone or to increase rIL-6-promoted MK colony formation. MK colony formation promoted by optimal doses of rIL-6 was, in fact, inhibited by rIL-1.alpha. at all concns. tested. Addn. of either recombinant **erythropoietin** (rEpo) or purified thrombocytopoiesis-stimulating factor (TSF) to assays contg. rIL-6 also resulted in inhibition of MK colony formation. The effect of suboptimal concns. of rIL-6 on MK colony formation was additive to that of rIL-3 but not rGM-CSF. The addn. of transforming growth factor .beta. (TGF-.beta.) resulted in a 58% redn. of rIL-6-promoted MK colony formation by LDBM. Thus, rIL-6 can promote in vitro megakaryocytopoiesis and this effect can be either augmented or inhibited by the addn. of several other cytokines. Recombinant IL-6, however, might affect the MK colony-forming unit by acting through bone marrow accessory cells or requiring the presence of as yet unidentified addnl. cytokines.

IT **9014-42-0**, Thrombocytopoiesis-stimulating factor
11096-26-7, **Erythropoietin**
RL: BIOL (Biological study)
(megakaryocytopoiesis modulation by interleukin-6 response to, of humans)

L9 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1989:551722 HCAPLUS
DN 111:151722
TI Interleukin-1 potentiates granulopoiesis and thrombopoiesis by producing hematopoietic factors in vivo
AU Nakai, Satoru; Aihara, Koutoku; Hirai, Yoshikatsu
CS Cell. Technol. Inst., Otsuka Pharm. Co., Ltd., Tokushima, 771-01, Japan
SO Life Sci. (1989), 45(7), 585-91
CODEN: LIFSAK; ISSN: 0024-3205
DT Journal
LA English
AB In vivo administration of recombinant human interleukin-1.beta. (rHu IL-1.beta.) selectively enhanced the recovery from granulocytopenia and thrombocytopenia caused by whole body irradn., in a dose dependent manner. Since IL-1 itself in vitro had no colony-stimulating activity (CSA), it was studied whether IL-1 can produce hematopoietic factors in vivo, which in turn will promote granulopoiesis and thrombopoiesis. Serum from IL-1 injected mice showed marked granulocyte/macrophage CSA (GM-CSA), but little megakaryocyte CSA (Meg-CSA). Interestingly, strong megakaryocyte potentiator (Meg-POT) activity was detected in the serum. Further anal. of the serum by gel filtration chromatog. showed that Meg-POT activity could be eluted in different fractions from GM-CSA. Since **erythropoietin** which is known to stimulate **erythropoiesis** also exhibited remarkable Meg-POT activity, serum from IL-1 injected mice were assayed for erythroid CSA.

Unlike **erythropoietin** the serum showed no erythroid CSA. IL-1 may potentiate granulopoiesis and thrombopoiesis by producing at least 2 distinct types of hematopoietic growth factors in vivo, namely granulocyte/macrophage colony-stimulating factor and a **thrombopoietin**-like factor.

IT **9014-42-0, Thrombopoietin**
RL: PRP (Properties)
(induction of, in interleukin 1 potentiation of thrombopoiesis)

L9 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1989:417771 HCAPLUS
DN 111:17771
TI The regulation of megakaryocyte and platelet production
AU McDonald, T. P.
CS Coll. Vet. Med., Univ. Tennessee, Knoxville, TN, USA
SO Int. J. Cell Cloning (1989), 7(3), 139-55
CODEN: IJCCE3; ISSN: 0737-1454
DT Journal; General Review
LA English
AB A review, with 130 refs., is given on the regulation of megakaryocyte and blood platelet formation by megakaryocyte colony-stimulating factor and **thrombopoietin**, with emphasis on the latter. **Erythropoietin** purifn., assay, chem. characterization, site of prodn., and immunol. are also discussed.

IT **9014-42-0, Thrombopoietin**
RL: BIOL (Biological study)
(megakaryocytopoiesis and thrombocytopoiesis regulation by)

L9 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1989:171452 HCAPLUS
DN 110:171452
TI Interacting cytokines regulate in vitro human megakaryocytopoiesis
AU Bruno, Edward; Miller, Michael E.; Hoffman, Ronald
CS Sch. Med., Indiana Univ., Indianapolis, IN, USA
SO Blood (1989), 73(3), 671-7
CODEN: BLOOAW; ISSN: 0006-4971
DT Journal
LA English
AB The effects of hematopoietic growth factors on in vitro human megakaryocytopoiesis were studied using a serum-depleted culture system. Both recombinant interleukin-3 (r-IL-3) and recombinant granulocyte-macrophage colony-stimulating factor (rGM-CSF) increased megakaryocyte (MK) colony formation above that obsd. in baseline cultures. Recombinant interleukin-4 (rIL-4) and interleukin 1.alpha. (rIL-1.alpha.) failed either to promote MK colony formation alone or to increase rIL-3 or rGM-CSF promoted colony formation. Recombinant **erythropoietin** (rEpo) and purified thrombocytopoiesis-stimulating factor (TSF) did not increase MK colony formation when added alone but synergized with rIL-1.alpha., leading to a 2-fold increase in MK colony formation. Such a synergistic relationship was not obsd. between rIL-4 and rEpo. In addn., TSF enhanced the ability of rIL-3 but not rGM-CSF to promote MK colony formation. Addn. of rEpo to optimal or suboptimal concns. of rGM-CSF or suboptimal concns. of rIL-3 resulted in a significant increase on the total no. of MK-contg. colonies, due to the appearance of multilineage colonies contg. MKs. The addn. of rEpo

to optimal concns. of rIL-3 resulted in increased nos. of multilineage colonies contg. MKs; however, the no. of total MK-contg. colonies was not significantly increased when compared to assays contg. rIL-3 alone. By contrast, transforming growth factor-.beta. (TGF-.beta.) inhibited both rIL-3, and rGM-CSF promoted MK colony formation, with optimal inhibition resulting in a 35%-45% redn. of MK colony formation. Thus, a no. of growth factors can regulate in vitro human megakaryocytopoiesis by either promoting or inhibiting MK colony formation.

IT **9014-42-0**, Thrombocytopoiesis-stimulating factor
11096-26-7, **Erythropoietin**
RL: BIOL (Biological study)
(megakaryocytopoiesis synergistic regulation by other cytokines and, of humans)

L9 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1991:141018 HCAPLUS
DN 114:141018
TI Stimulators of megakaryocyte development and platelet production
AU Williams, Neil
CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia
SO Prog. Growth Factor Res. (1990), 2(2), 81-95
CODEN: PGFREH; ISSN: 0955-2235
DT Journal; General Review
LA English
AB A review with 110 refs. Megakaryocytopoiesis is regulated at both the humoral and organ levels. Growth factors involved are the interleukins, esp. interleukin 6, and maybe **erythropoietin**. Whether **thrombopoietin** is interleukin 6 is discussed.
IT **9014-42-0**, **Thrombopoietin** **11096-26-7**, **Erythropoietin**
RL: BIOL (Biological study)
(megakaryocyte development stimulation by)

L9 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1990:545950 HCAPLUS
DN 113:145950
TI Tissue sources of murine megakaryocyte potentiator: biochemical and immunological studies
AU Banu, Naheed; Fawcett, Jenny; Williams, Neil; De Giorgio, Toni; Withy, Raymond
CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia
SO Br. J. Haematol. (1990), 75(3), 313-18
CODEN: BJHEAL; ISSN: 0007-1048
DT Journal
LA English
AB The immunol. and biochem. characteristics of murine megakaryocyte potentiator from lung and bone marrow were examd. and compared with thrombopoietic stimulatory factor. Biol. activity was not neutralized by anti-**erythropoietin**, but megakaryocyte potentiator activity from all three sources was abolished or reduced when the prepns. were treated with anti-thrombopoietic stimulatory factor or anti-interleukin-6. Megakaryocyte potentiator levels in lung conditioned medium were not enhanced from mice treated with lipopolysaccharide, in contrast to granulocyte-macrophage colony-stimulating factor (GM-CSF) levels. The biochem. properties of murine megakaryocyte potentiator from lung and bone marrow were

compared and found to be similar in the elution profiles from anion exchange, gel filtration and reversed phase liq. chromatog. It is concluded that the activities in lung and bone marrow are very similar if not identical, to interleukin-6.

IT **9014-42-0**, **Thrombopoietin**
RL: BIOL (Biological study)
(megakaryocyte potentiator similarity to)

L9 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1992:420563 HCAPLUS
DN 117:20563
TI Hemopoietic growth factors
AU Robak, Tadeusz
CS Prac. Farmakol. Klin., Akad. Med., Lodz, Pol.
SO Postepy Hig. Med. Dosw. (1991), 45(6), 461-96
CODEN: PHMDAD; ISSN: 0032-5449
DT Journal; General Review
LA Polish
AB A review, with 163 refs., on the role of interleukin-3, granulocyte-macrophage colony-stimulating factor (GM-CSF), granulocyte-colony stimulating factor (G-CSF), and macrophage colony-stimulating factor (M-CSF) in the proliferation and differentiation of hemopoietic cells and pathogenesis of leukemia. Role of **erythropoietin**, **thrombopoietin** and other thrombopoiesis-stimulating factors in the development of **hematopoiesis** is presented. Potential applications of recombinant hemophoietic growth factors in the treatment of myelodysplastic syndromes is considered. AIDS and other hematol., infections and neoplastic disorders are also discussed.

L9 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1994:154710 HCAPLUS
DN 120:154710
TI **Thrombopoietin**-like activity of recombinant human hemopoietic factors
AU Tange, Tsuyoshi
CS Fac. Med., Univ. Tokyo, Tokyo, 113, Japan
SO Igaku to Seibutsugaku (1993), 127(5), 339-44
CODEN: IGSBAL; ISSN: 0019-1604
DT Journal
LA Japanese
AB Proplatelet formation in vitro assay for recombinant human hemopoietic factors revealed that **erythropoietin** as well as interleukin 6 has a remarkable **thrombopoietin**-like activity, and the effect of **erythropoietin** on the proplatelet formation is synergistic with interleukin 6.

IT **9014-42-0**, **Thrombopoietin**
RL: BIOL (Biological study)
(human recombinant **erythropoietin** and interleukin 6 in relation to)

IT **11096-26-7**, **Erythropoietin**
RL: BIOL (Biological study)
(proplatelet formation response to recombinant human, **thrombopoietin** in relation to)

L9 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1993:536938 HCAPLUS

DN 119:136938
TI Effects of cytokines on granulopoiesis and thrombopoiesis
AU Nakahata, Tatsutoshi
CS Sch. Med., Shinshu Univ., Matsumoto, 390, Japan
SO Saishin Igaku (1993), 48(7), 1034-42
CODEN: SAIGAK; ISSN: 0370-8241
DT Journal; General Review
LA Japanese
AB A review with 17 refs., on the cytokines for proliferation of hematopoietic stem cells and precursor cells. Discussed are granulocyte colony stimulating factor and granulocyte macrophage colony stimulating factor (GM-CSF) for leukocyte formation, interleukin 3 (IL-3), IL-5 and GM-CSF for eosinophil formation, and IL-3 for basophil formation. IL-3, stem cell factor, human urine-derived megakaryocyte colony stimulating factor (Meg-CSF), and **erythropoietin** have the same activity as Meg-CSF. The megakaryocyte potentiator and **thrombopoietin** activities of IL-6, IL-11 and leukemia inhibitory factor are discussed.

L9 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1995:181904 HCAPLUS
DN 122:7584
TI Comparison of IL-6 and IL-11 for proplatelet process formation (PPF) activity
AU Tange, Tsuyoshi
CS Fac. Med., Univ. Tokyo, Tokyo, 113, Japan
SO Igaku to Seibutsugaku (1994), 129(3), 153-6
CODEN: IGSBAL; ISSN: 0019-1604
DT Journal
LA Japanese
AB Interleukin 6 (IL-6) exhibited **thrombopoietin**-like activity using proplatelet process formation (PPF) in vitro, whereas IL-11 exhibited neither such activity or enhancement of the activity of IL-6. In vivo **thrombopoietin**-like activity of IL-11 might be due to the action to the maturation stage of immature megakaryocytes. PPF appeared from day 1, reaching to a peak at day 2-2.5, and disappeared at day 4 when 10 ng/mL of IL-6 was supplemented to the culture medium of megakaryocytes contg. 2% bovine fetal serum. IL-6 showed activity of PPF in serum free medium. The activity of IL-6 was neutralized by anti-IL-6 antibody, and not by anti-IL-11 antibody. IL-6, and not IL-11, enhanced PPF of **erythropoietin** in serum-free medium.

L9 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1994:645523 HCAPLUS
DN 121:245523
TI In vivo effects of the immunosuppressant 15-deoxyspergualin on **hematopoiesis** in murine allogeneic bone marrow chimeras. Its thrombopoietic activity and reversal of adverse effects with granulocyte colony-stimulating factor and/or **erythropoietin**
AU Imamura, Masahiro; Han, Mingzhe; Hashino, Satoshi; Kobayashi, Hajime; Imai, Kiyotoshi; Kobayashi, Sumiko; Tanaka, Junji; Zhu, Xiofan; Kobayashi, Masanobu; et al.
CS 3rd Department Internal Medicine, Hokkaido University School Medicine, Sapporo, Japan
SO Transplantation (1994), 58(2), 214-23
CODEN: TRPLAU; ISSN: 0041-1337

DT Journal
LA English
AB When 15-deoxyspergualin (DSG), a potent immunosuppressant, was administered into [BALB/c.fwdarw.C3H/He] bone marrow chimeras from day 14 to day 25, increased thrombopoiesis was induced on day 20 to day 33, accompanied by marked leukocytopenia and anemia. The mean platelet counts in DSG-treated and control [BALB/c.fwdarw.C3H/He] bone marrow chimeras on day 25 were (114.1.+-.0.5).times.104/.mu.L vs. (58.6.+-.2.6).times.104/.mu.L (1.9-fold increase). Colony-forming units-megakaryocyte (CFU-Meg) were not significantly increased in DSG-treated bone marrow chimeras. Colony-forming units-granulocyte/macrophage (CFU-GM) and burst-forming units-erythroid (BFU-E) were decreased during DSG-treatment whereas CFU-Mix colony formations were rather increased, and more primitive hematopoietic progenitor cells (highly proliferative potential colony-forming units [CFU-HPP]) were not decreased in the same time period. Since CFU-GM and BFU-E colony formations were increased immediately after the cessation of DSG treatment, followed by the rebound of leukocyte counts and the recovery of Hb levels, the leukocytopenia and anemia appeared to be induced by a cytostatic effect of DSG. The adverse effect of DSG was partly reversed by the simultaneous administration of granulocyte colony-stimulating factor (G-CSF) and/or **erythropoietin** (**EPO**), suggesting the need for the administration of these cytokines in the case of bone marrow transplants treated with DSG. Furthermore, it was of note that DSG modulated **hematopoiesis** and stimulated the prodn. of **thrombopoietin** (**TPO**)-like cytokine(s) as well as interleukin-3 (IL-3).
IT **9014-42-0**, **Thrombopoietin**
RL: BSU (Biological study, unclassified); BIOL (Biological study) (-like cytokines; deoxyspergualin effect on **hematopoiesis** and reversal of its adverse effects with granulocyte colony-stimulating factor and/or **erythropoietin**)
IT **11096-26-7**, **Erythropoietin**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (deoxyspergualin effect on **hematopoiesis** and reversal of its adverse effects with granulocyte colony-stimulating factor and/or **erythropoietin**)

L9 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1994:526562 HCAPLUS
DN 121:126562
TI Stimulation of megakaryocytopoiesis and thrombopoiesis by the c-Mpl ligand
AU de Sauvage, Frederic J.; Hass, Philip E.; Spencer, Susan D.; Malloy, Beth E.; Gurney, Austin L.; Spencer, Steven A.; Darbonne, Walter C.; Henzel, William J.; Wong, Suzy C.; et al.
CS Dep. Mol. Biol., Genetech, South San Francisco, CA, 94080, USA
SO Nature (London) (1994), 369(6481), 533-8
CODEN: NATUAS; ISSN: 0028-0836
DT Journal
LA English
AB Physiol. platelet synthesis is thought to require the humoral activities of meg-CSF and **thrombopoietin**, which resp. promote proliferation and maturation of megakaryocytic cells. A meg-CSF/**thrombopoietin**-like protein that is present in

plasma of irradiated pigs has been purified and cloned. This protein binds to and activates the c-mpl protein, a member of the cytokine receptor superfamily. The isolated Mpl ligand shares homol. with **erythropoietin** and stimulates both megakaryocytopoiesis and thrombopoiesis.

IT **11096-26-7, Erythropoietin**
RL: PRP (Properties)
(c-Mpl ligand of pig and human homol. with, sequence in relation to)

L9 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1995:993999 HCAPLUS
DN 124:53385
TI CD34+ endothelial cell lines derived from murine yolk sac induce the proliferation and differentiation of yolk sac CD34+ hematopoietic progenitors
AU Fennie, Christopher; Cheng, Jill; Dowbenko, Donald; Young, Paul; Lasky, Laurence A.
CS Department of Immunology, Genentech, Inc., South San Francisco, CA, USA
SO Blood (1995), 86(12), 4454-67
CODEN: BLOOAW; ISSN: 0006-4971
DT Journal
LA English
AB Embryonic **hematopoiesis** is initiated in part in the blood islands of the yolk sac. Previous confocal microscopic anal. has shown that the CD34 antigen, a mucin-like cell surface glycoprotein that is expressed by hematopoietic progenitors and all endothelial cells of the adult and embryo, is also found on a subset of luminal hematopoietic-like cells in the yolk sac blood islands as well as on the vascular endothelium lining these early hematopoietic locations. The authors show here that, as in all other hematopoietic sites thus far examd., immunoaffinity-purified CD34+ nonadherent cells from murine yolk sacs contain the vast majority of erythroid and myeloid progenitor cell colony forming activity. To examine the developmental interactions between these CD34+ hematopoietic progenitor cells of the yolk sac and the CD34+ yolk sac endothelium, the authors have immunoaffinity-purified adherent endothelial cells from day 10.5 yolk sacs using CD34 antiserum and produced cell lines by transformation with a retrovirus expressing the polyoma middle T antigen. Anal. of these cell lines for CD34, von Willebrand's factor, FLK 1 and FLT 1 expression, and capillary growth in Matrigel indicates that they appear to be endothelial cells, consistent with their original phenotype in vivo. Co-culture of yolk sac CD34+ hematopoietic cells on these endothelial cell lines results in up to a 60-fold increase in total hematopoietic cell no. after approx. 8 days. Anal. of these expanded hematopoietic cells showed that the majority were of the monocyte/macrophage lineage. In addn., examn. of the cultures showed the rapid formation of numerous cobble-stone areas, a previously described morphol. entity thought to be representative of early pluripotential stem cells. Scrutiny of the ability of these endothelial cell lines to expand committed progenitor cells showed up to a sixfold increase in erythroid and myeloid colony-forming cells after 3 to 6 days in culture, consistent with the notion that these embryonic endothelial cells mediate the expansion of these precursor cells. Polymerase chain reaction analyses showed that most of the cell lines produce

FLK-2/FLT-3 ligand, stem cell factor, macrophage colony-stimulating factor, leukemia-inhibitory factor, and interleukin-6 (IL-6), whereas there is a generally low or not measurable prodn. of granulocyte colony-stimulating factor, granulocyte-macrophage colony-stimulating factor, IL-1, IL-3, transforming growth factor .beta.-1, **erythropoietin**, or **thrombopoietin**. The output of mature hematopoietic cells from these co-cultures can be modified to include an erythroid population by the addn. of exogenous **erythropoietin**. These data suggest that endothelial cell lines derived from the yolk sac provide an appropriate hematopoietic environment for the expansion and differentiation of yolk sac progenitor cells into at least the myeloid and erythroid lineages.

L9 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1995:867704 HCAPLUS
DN 124:53739
TI Polypeptide ligands for the gene c-mpl hemopoietin receptor, their preparation, and application for the production of **thrombopoietin** and treatment of thrombocytopenias
IN Eaton, Dan L.; De Sauvage, Frederick, J.
PA Genentech Inc., USA
SO Fr. Demande, 327 pp.
CODEN: FRXXBL
PI FR2714670 A1 950707
AI 95FR-0000007 950102
PRAI 94US-0176553 940103
94US-0185607 940121
94US-0194689 940215
94US-0223263 940404
94US-0249376 940525
94US-0348658 941202
94US-0348657 941202
DT Patent
LA French
AB The invention involves a **thrombopoietin** (**TPO**) which has been isolated, a DNA coding for **TPO**, and recombinant or synthetic procedures for prepn. or purifn. of **TPO**. It is shown that various forms of **TPO** affect the replication, differentiation, and maturation of blood cells, esp. megakaryocytes and megakaryocyte progenitor cells. Consequently, TPOs can be used in treatment of thrombocytopenias due to anomalies in prodn. of blood platelets, splenic sequestration of platelets, immune destruction of platelets, iatrogenic thrombocytopenia, immune thrombocytopenic purpura, AIDS, etc.
IT **9014-42-0P**, **Thrombopoietin**
RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polypeptide ligands for the gene c-mpl hemopoietin receptor, their prepn., and application for the prodn. of **thrombopoietin** and treatment of thrombocytopenias)
IT **11096-26-7P**, **Erythropoietin**
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polypeptide ligands for the gene c-mpl hemopoietin receptor, their prepn., and application for the prodn. of

thrombopoietin and treatment of thrombocytopenias)

L9 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1995:827294 HCAPLUS
DN 123:219232
TI The Mpl-ligand or **thrombopoietin** or megakaryocyte growth and differentiative factor has both direct proliferative and differentiative activities on human megakaryocyte progenitors
AU Debili, Najet; Wendling, Francoise; Katz, Andre; Guichard, Josette; Breton-Gorius, Janine; Hunt, Pam; Vainchenker, William
CS INSERM U, Institut Gustave Roussy, Fr.
SO Blood (1995), 86(7), 2516-25
CODEN: BLOOAW; ISSN: 0006-4971
DT Journal
LA English
AB Previously, it was believed that megakaryocytopoiesis was regulated by two types of humoral factors: megakaryocyte colony-stimulating factor (MK-CSF), which acts on progenitors inducing their proliferation, and **thrombopoietin** (**TPO**), a megakaryocyte(s) (MK) maturational factor that induces platelet formation. The recently cloned Mpl-ligand (Mpl-L) seems to have both properties in vivo and in vitro and has also been called **TPO**. However, it cannot be excluded that a part of these activities is due to a synergistic effect with growth factors present in the serum or synthesized by accessory cells. To delineate the precise **TPO** (Mpl-L) biol. activities, we performed serum-free cultures at limiting cell diln. Target cells were adult human marrow CD34+CD41+ cells, which represent a highly selected population of late MK progenitor or transitional cells. Cells were purified using a flow cytometer equipped with an automatic cloning design unit. We detd. that the recombinant mol. had a biol. activity that reached a plateau at 10 ng/mL. At this concn., a linear relationship between the av. MK no. per well and the no. of cells seeded (between 1 to 50 cells per well) was obsd. At one cell per well, 60% of the wells contained a single MK at day 5 of culture. Half of these wells contained only one large MK, whereas the other half contained several MK (up to 25), demonstrating that **TPO** has direct proliferative biol. activity. In contrast, at limiting diln., none of the other cytokines tested (stem cell factor [SCF], interleukin-6 [IL-6], and **erythropoietin** [**Epo**]) were effective, whereas IL-3 showed a mild effect. However, a combination of SCF plus IL-6 plus IL-3 produced similar results as **TPO** alone. Addn. of the other cytokines to **TPO** did not enhance the cloning efficiency of the CD34+ CD41+ cells but increased twofold the av. no. of MKs per clone. MKs reached a ploidy of 32N and 64N in the presence of **TPO**. The mean ploidy value was approx. 6 and was not modified by addn. of the other cytokines. At the ultrastructural level, a majority of the MKs showed maturational defects related to an imbalance between the synthesis of .alpha.-granules and demarcation membranes. However, a fraction (about 30%) had a cytoplasmic maturation that exactly mimicked that of marrow MKs. In addn., proplatelet-shedding MKs were obsd. in the cultures, even at limiting diln. Such a result was not obsd. with any other individual cytokines, including the combination of three cytokines. This study shows that, at the unicellular level, **TPO** (Mpl-L) is both a proliferative and differentiative

factor for MK progenitors.

IT **9014-42-0, Thrombopoietin**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(**thrombopoietin** effect on proliferation and differentiation of human megakaryocyte progenitors)

L9 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 1996 ACS
AN 1995:827291 HCAPLUS
DN 123:219231
TI Recombinant human **thrombopoietin** (Mpl ligand) enhances proliferation of erythroid progenitors
AU Kobayashi, Masao; Laver, Joseph H.; Kato, Takashi; Miyazaki, Hiroshi; Ogawa, Makio
CS Department of Pediatrics and Medicine, Medical University of South Carolina, Charleston, SC, USA
SO Blood (1995), 86(7), 2494-9
CODEN: BLOOAW; ISSN: 0006-4971
DT Journal
LA English
AB We have studied the effects of recombinant human **thrombopoietin** (**TPO**, Mpl ligand) on human **hematopoiesis** in vitro. **TPO** alone did not support erythroid burst formation but, in the presence of **erythropoietin**, it enhanced erythroid burst formation from CD34+ bone marrow and cord blood cells. The burst-promoting activity (BPA) was stronger under 5% serum than 30% serum conditions. The direct nature of BPA effects was documented by replating studies of early erythroid bursts. The BPA of **TPO** was less than that of interleukin-3 but was comparable with that of granulocyte/macrophage colony-stimulating factor and steel factor. The sol. form of Mpl receptor inhibited burst enhancing effects of **TPO**, suggesting that the BPA effects of **TPO** are mediated through the Mpl receptor. These results further delineate the physiol. roles of **TPO** and may aid in the detn. of the clin. usages of **TPO**.

IT **9014-42-0, Thrombopoietin**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(recombinant human; **thrombopoietin** enhances proliferation of erythroid progenitors)

Text (2)

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CLUSTER NAME      CLUSTER DEFINITION
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.BIO              MEDLINE HCAPLUS EMBASE BIOSIS WPIDS IFIPAT
                  BIOTECHDS DISSABS CONFSCI LIFESCI SCISEARCH JAPIO
                  JICST-EPLUS


L10             QUE  (11096-26-7 OR ERYTHROPOIETIN# OR EPO)
L11             QUE  (9014-42-0 OR THROMBOPOIETIN OR TPO OR MPL LIGAND OR
                 TSF)
L12             QUE  L10 AND L11 AND (TREAT? OR THERAP? OR ADMINISTER?) A
                ND (ERYTHROPOIESIS OR ANEMIA# OR ERYTHROID CELL#)


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F2          12   MEDLINE
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F4           6   SCISEARCH
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F6           1   LIFESCI


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L11             QUE  (9014-42-0 OR THROMBOPOIETIN OR TPO OR MPL LIGAND OR
                 TSF)
L12             QUE  L10 AND L11 AND (TREAT? OR THERAP? OR ADMINISTER?) A
                ND (ERYTHROPOIESIS OR ANEMIA# OR ERYTHROID CELL#)
L13          13 SEA FILE=EMBASE L10 AND L11 AND (TREAT? OR THERAP? OR ADM
                INISTER?) AND (ERYTHROPOIESIS OR ANEMIA# OR ERYTHROID CEL
                L#)
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                MINISTER?) AND (ERYTHROPOIESIS OR ANEMIA# OR ERYTHROID CE
                LL#)
L15           8 SEA FILE=BIOSIS L10 AND L11 AND (TREAT? OR THERAP? OR ADM
                INISTER?) AND (ERYTHROPOIESIS OR ANEMIA# OR ERYTHROID CEL
                L#)
L16           6 SEA FILE=SCISEARCH L10 AND L11 AND (TREAT? OR THERAP? OR
                ADMINISTER?) AND (ERYTHROPOIESIS OR ANEMIA# OR ERYTHROID
                CELL#)
L17           1 SEA FILE=WPIDS L10 AND L11 AND (TREAT? OR THERAP? OR ADMI
                NISTER?) AND (ERYTHROPOIESIS OR ANEMIA# OR ERYTHROID CELL
                #)
L18           1 SEA FILE=LIFESCI L10 AND L11 AND (TREAT? OR THERAP? OR AD
                MINISTER?) AND (ERYTHROPOIESIS OR ANEMIA# OR ERYTHROID CE
                LL#)
L19          41 SEA L12
L20          19 DUP REM L19 (22 DUPLICATES REMOVED)
L21          19 SOR L20 PY
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=> d bib ab 1-

L21 ANSWER 1 OF 19 WPIDS COPYRIGHT 1996 DERWENT INFORMATION LTD
AN 95-292944 [38] WPIDS
CR 95-293121 [38]
DNC C95-131889
TI Stimulation of **erythropoiesis** using **thrombopoietin** and opt. **erythropoietin** - for the **treatment** of thrombocytopenia and anaemia..
DC B04
IN BURKHEAD, S K; FOSTER, D C; HAGEN, F S; HOLLY, R D; KAUSHANSKY, K; KUIJPER, J L; LOFTON-DAY, C; LOK, S; OORT, P J
PA (UNIW) UNIV WASHINGTON
CYC 57
PI WO9521626 A1 950817 (9538)* EN 66 pp
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KE KG KP KR KZ LK LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
AU9474810 A 950829 (9548)
AU9517471 A 950829 (9548)
AU9518435 A 950829 (9548)
ADT WO9521626 A1 95WO-US01829 950209; AU9474810 A 94AU-0074810 940805; AU9517471 A 95AU-0017471 950208; AU9518435 A 95AU-0018435 950209
FDT AU9474810 A Based on WO9521920; AU9517471 A Based on WO9521930; AU9518435 A Based on WO9521626
PRAI 94US-0347748 941201; 94US-0196025 940214; 94US-0203197 940225; 94US-0215203 940321; 94US-0252491 940601; 94US-0288417 940809; 94US-0335566 941107; 94US-0250859 940527
AB WO 9521626 A UPAB: 950927
A method of stimulating in vitro **erythropoiesis** comprises culturing bone marrow (BM) or peripheral blood cells (PBCs) with an amt. of **thrombopoietin** (**TPO**) and opt. **erythropoietin** (**EPO**), sufficient to produce an increase in the number of erythrocytes or erythrocyte precursors as compared to cells cultured in the absence of **TPO**.
USE - The methods can be used in the **treatment** of cytopenias and anaemias such as those caused by destruction of haematopoietic cells in bone marrow, in the **treatment** of cancer with chemotherapy and radiation, and pathological conditions such as myelodysplasia, AIDS, aplastic anaemia, autoimmune disease or inflammatory disease.
Dwg.0/2

L21 ANSWER 2 OF 19 MEDLINE
AN 73217200 MEDLINE
TI Humoral control of hemopoiesis.
AU Gordon A S; Zanjani E D
SO ADVANCES IN INTERNAL MEDICINE, (1972) 18 39-58. Ref: 99
Journal code: 2NG. ISSN: 0065-2822.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals

EM 7310

L21 ANSWER 3 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 77178926 EMBASE
TI Relationships between thrombopoiesis and **erythropoiesis**: with studies of the effects of preparations of **thrombopoietin** and **erythropoietin**.
AU Evatt B.L.; Spivak J.L.; Levin J.
CS Dept. Med., Johns Hopkins Univ. Sch. Med., Baltimore, Md., United States
SO BLOOD, (1976) 48/4 (547-558).
CODEN: BLOOAW
LA English
AB The effects of administration of partially purified human urinary **erythropoietin** and rabbit **thrombopoietin**, and of endogenously produced **erythropoietin** and **thrombopoietin** on both red cell and platelet production were examined in mice. Partially purified **thrombopoietin** was prepared from rabbit plasma by sequential fractionation with ammonium sulfate precipitation, and DEAE and Sephadex G 100 chromatography. Preparations of **thrombopoietin** and partially purified human urinary **erythropoietin** (NIH No. H 11 TaLSL) were **administered** subcutaneously to normal mice, and the rate of incorporation of selenomethionine 75Se into platelets was measured as an index of thrombopoietic activity of the infused material. **Erythropoietin** and **thrombopoietin** were assayed for erythropoietic activity by measuring the rate of appearance of 59Fe in the red cells of posthypoxic polycythemic mice. Preparations containing **thrombopoietin** had barely measurable erythropoietic activity, and 7 units of partially purified **erythropoietin** had little thrombopoietic activity. When endogenous levels of **erythropoietin** were increased by hypoxia, platelet production was not enhanced. Similarly, increased levels of **thrombopoietin**, induced in response to thrombocytopenia produced by platelet antiserum, did not alter red cell production. These data suggest that physiologically increased levels of **thrombopoietin** do not stimulate **erythropoiesis**, and that physiologically increased levels of **erythropoietin** do not stimulate thrombopoiesis. However, currently available, partially purified preparations of **erythropoietin** and **thrombopoietin** may be capable of stimulating both platelet and red cell production if used in sufficient quantities.

L21 ANSWER 4 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 80197857 EMBASE
TI Thrombopoiesis and megakaryocyte colony stimulating factor in the urine of patients with aplastic anaemia.
AU Enomoto K.; Kawakita M.; Kishimoto S.; et al.
CS II Dept. Int. Med., Kumamoto Univ. Med. Sch., Kumamoto, Japan
SO BR. J. HAEMATOL., (1980) 45/4 (551-556).
CODEN: BJHEAL
CY United Kingdom
LA English
AB The urinary extracts from patients with aplastic anaemia and from healthy donors were investigated in vivo and in vitro for their ability to stimulate megakaryopoiesis and platelet production. There

was a significantly higher concentration of thrombopoiesis stimulating factor (**TSF**) and megakaryocyte colony stimulating factor (MEG-CSF) in the urine from patients with aplastic anaemia than in that from healthy donors. Neuraminidase **treatment** did not affect the thrombopoietic activity of **TSF**, whereas coexisting **erythropoietin** (**EPO**) in the extract lost its activity in vivo. These findings suggest that **TSF** and/or MEG-CSF seems to be different from **EPO** and that the urine from aplastic anaemia patients would be a good source of **TSF** and MEG-CSF for purification and characterization.

L21 ANSWER 5 OF 19 BIOSIS COPYRIGHT 1996 BIOSIS
AN 87:41338 BIOSIS
DN BA83:20684
TI NEURAMINIDASE AND HEMATOPOIETIC FACTORS FROM HUMAN URINE.
AU SHIMIZU T; NOGUCHI J; SCHUEBEL K; MIYAKE T; MURPHY M J JR
CS HIPPLE CANCER RES. CENT., 4100 SOUTH KETTERING BLVD., DAYTON, OHIO 45439-2092, USA.
SO EXP CELL BIOL 54 (4). 1986. 225-233. CODEN: ECEBDI ISSN: 0304-3568
LA English
AB Human urinary neuraminidase, an enzyme that releases sialic acid from hematopoietic factors found in urinary preparations, was partially characterized, and a method was developed to derive these hematopoietic factors free of enzyme activity. Neuraminidase in urinary preparations from healthy humans and aplastic anemic (AA) patients had optimal activity at pH 5.3 and hydrolyzed both .alpha.2 .fwdarw. 3 and .alpha.2 .fwdarw. 6 type ketosidic linkages of N-acetyl-neuramin lactose and .alpha.1-acid glycoprotein. When subjected to Sephacryl S-300 gel filtration, urinary neuraminidase showed a single peak of activity with an apparent molecular weight of 380,000 daltons, even under denaturing conditions (6 M guanidine hydrochloride). Furthermore, among a variety of compounds tested, no potent inhibitor of the enzyme was found. Heat **treatment** of AA urinary preparations eliminated about 80% of neuraminidase activity, while successive two-step ethanol precipitation eliminated residual enzyme. **Erythropoietin**, megakaryocyte colony-stimulating factor (CSF) and granulocyte/macrophage CSF activities were retained after these **treatments**.

L21 ANSWER 6 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 88136994 EMBASE
TI Regulation of megakaryocytopoiesis by thrombopoietina.
AU McDonald T.P.
CS University of Tennessee, College of Veterinary Medicine, Knoxville, TN 37901-1071, United States
SO ANN. NEW YORK ACAD. SCI., (1987) 509/- (1-24).
ISSN: 0077-8923 CODEN: ANYAA
CY United States
DT Journal
FS 002 Physiology
022 Human Genetics
025 Hematology
029 Clinical Biochemistry
LA English
AB It is clear that **thrombopoietin** is a major hormonal regulator of megakaryocytopoiesis both in vitro and in vivo, and,

thus, blood platelet production. Existing data show that the action, chemical nature, and immunologic properties of **thrombopoietin** from HEK cell culture medium and either endogenously produced or exogenously **administered** **thrombopoietin** from animal sources are similar, if not identical. Absolute identity, however, will require comparisons of amino acid sequences of the two preparations. Recent studies have shown that not only does **TSF** potentiate the action of meg-CSF, but it also has a direct effect on precursor cells to increase the number of megakaryocytic colonies. Other in vitro work showed that **TSF** stimulates directly the SAChE+ precursor cells to become mature megakaryocytes and causes FMLC to differentiate into megakaryocytic colonies. In vivo, **TSF** increases megakaryocyte size and number, it causes an elevation in the number of the SAChE+ precursor cells in mouse marrow and increases the maturation of megakaryocytes. Moreover, **TSF** increases the endomitosis of megakaryocytes in the marrow of mice, along with elevating the number of megakaryocytic colonies in spleens of lethally irradiated bone marrow reconstituted mice. Platelet production is also stimulated in mice by **TSF** as evidenced by elevated isotopic incorporation into platelets; it increases platelet sizes, and when **administered** in high doses **TSF** elevates platelet counts. Full development of colonies of megakaryocytes may depend on two growth factors. It has been hypothesized that one factor, meg-CSF, is effective in clonal expansion whereas a second factor is predominantly involved in the endomitotic phase of megakaryocyte development. Multifactoral regulation has been observed for the other cell lineages, and a general proposal for hematopoietic development has been outlined by Iscove. In this scheme, specificity of **erythropoietin** to **erythroid cell** lineage is indicated. Previous work, however, shows that recombinant **erythropoietin** can act as a meg-CSF stimulus, indicating that much is yet to be learned about the action of hematopoietic regulatory factors. Although the present study showed that **TSF** may in some circumstances stimulate and early cell in the megakaryocytic series, its major effect is probably on the more differentiated population, leading to maturation of megakaryocytes and platelet production. Although several laboratories have now reported techniques for the growth of colonies of megakaryocytes, there is still considerable disagreement as to the effects of various stimulatory factors. The complexities of the culture systems described by these workers, to include the support medium, the concentrations of cells, the frequency of megakaryocyte colonies, and required growth-promoting factors point out the need for standardization of the culture system. It was recently reported by Hoffman et al., that it was not until a serum-free culture system was established that **TSF** from HEK cell culture medium showed an effect on stimulating megakaryocytic colonies. This finding confirms earlier work by Kalmaz and McDonald and Freedman et al., that when cells are cultured under optimum conditions, **TSF** from HEK cell culture medium will increase the number of megakaryocytic colonies in vitro. The present studies show that **TSF** from HEK cell culture medium and plasma from thrombocytopenic mice will stimulate an increase in the number of SAChE+ cells in marrow of recipient mice. Because SAChE+ cells are known to represent immature megakaryocytes, their stimulation indicates that **TSF** has

an effect on an early precursor cell. Long et al. showed that **TSF** was required for the small round nucleated cell (SAChE+ cell) to develop into a large mature megakaryocyte. The use of SAChE+ cells for the study of **TSF** will aid in establishing the target cells, and, therefore, clarify our understanding of the mode of action of the hormone. Previous studies have been successful in developing bioassays for **TSF**, raising both polyclonal and monoclonal antibodies against the factor, clarifying the **TSF** target cells, and establishing the mode of action of **TSF**. Additional studies are needed, however, for the development of radioimmunoassays for **TSF** and elucidating the feedback mechanism that causes **TSF** to be produced. Now that **TSF** has been purified to homogeneity and monoclonal antibodies to the hormone have been developed, experiments to clone the gene for **thrombopoietin** will be forthcoming. After successful gene cloning and the production of large amounts of recombinant **thrombopoietin**, the pure **TSF** will be helpful in clarifying its mode of action and will no doubt prove to be beneficial to several patients with various hematological disorders.

L21 ANSWER 7 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 88007092 EMBASE
TI The role of **erythropoietin**, megakaryocyte colony-stimulating factor, and T-cell-derived factors on human megakaryocyte colony formation: Evidence for T-cell-mediated and T-cell-independent stem cell proliferation.
AU Geissler D.; Konwalinka G.; Peschel C.; Braunsteiner H.
CS University of Innsbruck, Clinic of Internal Medicine, Innsbruck, Austria
SO EXP. HEMATOL., (1987) 15/8 (845-853).
ISSN: 0301-472X CODEN: EXHEBH
CY Germany, Federal Republic of
DT Journal
FS 005 General Pathology and Pathological Anatomy
025 Hematology
026 Immunology, Serology and Transplantation
LA English
AB Recent studies suggest that megakaryocytopoiesis is governed by a dual-level regulatory process, with megakaryocyte colony-stimulating factor (Meg-CSF) primarily influencing proliferation of the committed precursors and **thrombopoietin** required for megakaryocyte ploidy amplification and for maturation. The authors have examined different sources of Meg-CSF in a microagar culture system with a view to their capacity to enhance megakaryocyte colony formation directly or via an indirect T-lymphocyte- or monocyte-mediated effect. The comparative influences of phytohemagglutinin-stimulated leukocyte-conditioned medium (PHA-LCM), **erythropoietin** (**Epo**), sera of patients with severe aplastic **anemia**, and direct PHA addition to the culture were evaluated for their capacity to enhance megakaryocytic colony formation as well as for the maturation rate of megakaryocytes (Mk) grown in our microagar culture system. Each **treatment** by itself enhanced colony formation from unseparated low-density cells. Removal of T-lymphocytes and monocytes from the bone marrow sample caused a cessation of the enhancing effect of direct PHA addition to cultures stimulated with

Epo, but did not influence the enhancing activities of severe aplastic **anemia** serum (SAA), PHA-LCM, and **Epo**. The results show that SAA serum, **Epo**, and PHA-LCM induced Mk colony formation directly and therefore may act via a common mechanism. Differences, however, were observed concerning their colony-stimulating potency and their influence on the Mk maturation rate.

L21 ANSWER 8 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 89198586 EMBASE
TI Interleukin-1 potentiates granulopoiesis and thrombopoiesis by producing hematopoietic factors in vivo.
AU Nakai S.; Aihara K.; Hirai Y.
CS Cellular Technology Institute, Otsuka Pharmaceutical Co., Ltd., Tokushima 771-01, Japan
SO LIFE SCI., (1989) 45/7 (585-591).
ISSN: 0024-3205 CODEN: LIFSAK
CY United States
DT Journal
FS 025 Hematology
026 Immunology, Serology and Transplantation
030 Pharmacology
LA English
AB In vivo administration of recombinant human interleukin-1.beta. (rHu IL-1.beta.) selectively enhanced the recovery from granulocytopenia and thrombocytopenia caused by whole body irradiation, in a dose-dependent manner. Since IL-1 itself in vitro had no colony-stimulating activity (CSA), we studied whether IL-1 can produce hematopoietic factors in vivo, which in turn will promote granulopoiesis and thrombopoiesis. Serum from IL-1 injected mice showed marked granulocyte/macrophage CSA (GM-CSA), but little megakaryocyte CSA (Meg-CSA). Interestingly, strong megakaryocyte potentiator (Meg-POT) activity was detected in the serum. Further analysis of the serum by gel filtration chromatography showed that Meg-POT activity could be eluted in different fractions from GM-CSA. Since **erythropoietin** which is known to stimulate **erythropoiesis** also exhibited remarkable Meg-POT activity, serum from IL-1 injected mice were assayed for erythroid CSA. We found that unlike **erythropoietin** the serum showed no erythroid CSA. Taken together, these results suggest that IL-1 may potentiate granulopoiesis and thrombopoiesis by producing at least two distinct types of hematopoietic growth factors in vivo, namely granulocyte/macrophage colony-stimulating factor and a **thrombopoietin**-like factor.

L21 ANSWER 9 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 91105538 EMBASE
TI Clinical use of hematopoietic factors.
AU Takaku F.
CS National Medical Center Hospital, 1-21-1 Toyama, Shinjuku-ku, Tokyo 162, Japan
SO IRYO JAP. J. NATL. MED. SERV., (1991) 45/1 (3-8).
ISSN: 0021-1699 CODEN: IRYOAV
CY Japan
DT Journal
FS 016 Cancer
025 Hematology

037 Drug Literature Index
LA Japanese
SL English

L21 ANSWER 10 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 92310995 EMBASE
TI [Growth factors and hemopoiesis. Physiopathology and clinical application].
I FATTORI DI CRESCITA E L'EMOPOIESI. FISIOPATOLOGIA ED APPLICAZIONI CLINICHE.
AU Buemi M.; Allegra A.; Frisina N.
CS Via Oddo delle Colonne, 13, 98100 Messina, Italy
SO RECENTI PROG. MED., (1992) 83/7-8 (460-469).
ISSN: 0034-1193 CODEN: RPMDAN
CY Italy
DT Journal
FS 025 Hematology
030 Pharmacology
037 Drug Literature Index
LA Italian
SL English; Italian
AB Recently biotechnologic progress has, through the technique of the recombinant DNA, allowed a low cost production of large amount of several growth factors. Such a large availability has made possible to either carry out deeper investigations on the physiopathology of the hemopoietic regulation and perform new **therapeutic** approaches under different pathologic conditions. The most interesting acquisition concerning the biology of hemopoiesis to which such investigations have addressed us is the inadequacy of the protocols adopted till now. Such protocols considered only a simple vision of an elective action of a given growth factor during an exact maturation period of a determined cell colony. On the contrary, it was possible to point out a close network of inter-relationship among the different factors, which sometime impedes a clear distinction for each single factor, between actions of competence and progression in the cell maturation phenomena. However, the present uncertainty pertaining to the regulation of hemopoiesis has not impeded the performance of clinical trials with positive findings in several pathologic conditions. The administration of recombinant **erythropoietin** has for example allowed to intervene in a resolutive way on the **anemia** in uremic subjects, and seems giving satisfactory results also in subjects with non renal origin anemic conditions. Satisfactory results were also obtained through the use of Granulocyte-Macrophage CSF and of the Granulocyte-CSF, which by preventing neutropenia have allowed the performance of more adequate chemiotherapeutic protocols in the neoplastic subjects. New interesting perspectives are now coming for the use of Interleukin-3 in the **treatment** of the aplastic anaemia.

L21 ANSWER 11 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 93266285 EMBASE
TI Combination **therapy** with rhGM-CSF and rhEpo for two patients with refractory **anemia** and aplastic **anemia**.
AU Takahashi M.; Aoki A.; Mito M.; Nikkuni K.; Ohtsuka T.; Saitoh H.; Moriyama Y.; Shibata A.

CS First Dept of Internal Medicine, Niigata University, School of Medicine, 1-754 Asahimachi, Niigata 951, Japan
SO HEMATOL. PATHOL., (1993) 7/3 (153-158).
ISSN: 0886-0238 CODEN: HEPAEG
CY United States
DT Journal
FS 025 Hematology
037 Drug Literature Index
LA English
SL English
AB Because GM-CSF possesses burst-promoting activity (BPA) and megakaryocyte colony-stimulating activity (Meg-CSF) as well as stimulating activity on granulocyte-macrophage progenitors and **erythropoietin** (**Epo**) has **thrombopoietin** -like activity the combination **therapy** of GM-CSF and **Epo** seems to be more effective for stimulating **erythropoiesis** and thrombocytopoiesis in patients with pancytopenia. For this reason the combination **therapy** of recombinant human GM-CSF (rhGM-CSF) and rhEpo was performed in two patients with refractory **anemia** (RA) and aplastic **anemia** (AA). **Epo**-unresponsive **anemia** was remarkably improved by adding rhGM-CSF to **Epo** and the effect lasted for 11/2 months in a patient with RA but severe **anemia** occured again immediately after the discontinuation of **Epo**. The neutralizing antibodies against GM-CSF were not demonstrated at the phase when **anemia** re-progressed in this patient. In a patient with AA **anemia** and thrombocylopenia, which were refractory to previous administration of rhGM-CSF, responded to the combined administration of GM-CSF and **Epo**. Although the effects were maintained for 31/2 months, the **anemia** and thrombocytopenia became worse again after the administration of rhGM-CSF was changed from daily to every other day. These findings suggest the usefulness of combination **therapy** of GM-CSF and **Epo** for patients with pancytopenia.

L21 ANSWER 12 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 94245445 EMBASE
TI In vivo effects of the immunosuppressant 15-deoxyspergualin on hematopoiesis in murine allogeneic bone marrow chimeras: Its thrombopoietic activity and reversal of adverse effects with granulocyte colony-stimulating factor and/or **erythropoietin**
AU Imamura M.; Han M.; Hashino S.; Kobayashi H.; Imai K.; Kobayashi S.; Tanaka J.; Zhu X.; Kobayashi M.; Fujii Y.; Kasai M.; Sakurada K.; Miyazaki T.
CS Third Dept. of Internal Medicine, Hokkaido Univ. School of Medicine, Kita-15, Nishi-7, Kita-ku, Sapporo 060, Japan
SO TRANSPLANTATION, (1994) 58/2 (214-223).
ISSN: 0041-1337 CODEN: TRPLAU
CY United States
DT Journal
FS 025 Hematology
030 Pharmacology
037 Drug Literature Index
LA English
SL English

AB When 15-deoxyspergualin (DSG), a potent immunosuppressant, was **administered** into [BALB/c.fwdarw.C3H/He] bone marrow chimeras from day 14 to day 25, increased thrombopoiesis was induced on day 20 to day 33, accompanied by marked leukocytopenia and **anemia**. The mean platelet counts in DSG-**treated** and control [BALB/c.fwdarw.C3H/He] bone marrow chimeras on day 25 were (114.1.+-.0.5) x 104/.mu.l versus (58.6.+-.2.6) x 104/.mu.l (1.9-fold increase). Colony-forming units-megakaryocyte (CFU-Meg) were not significantly increased in DSG- **treated** bone marrow chimeras. Colony-forming units-granulocyte/macrophage (CFU-GM) and burst-forming units-erythroid (BFU-E) were decreased during DSG- **treatment** whereas CFU-Mix colony formations were rather increased, and more primitive hematopoietic progenitor cells (highly proliferative potential colony-forming units [CFU-HPP]) were not decreased in the same time period. Since CFU-GM and BFU-E colony formations were increased immediately after the cessation of DSG **treatment**, followed by the rebound of leukocyte counts and the recovery of hemoglobin (Hb) levels, the leukocytopenia and **anemia** appeared to be induced by a cytostatic effect of DSG. The adverse effect of DSG was partly reversed by the simultaneous administration of granulocyte colony-stimulating factor (G-CSF) and/or **erythropoietin** (**EPO**), suggesting the need for the administration of these cytokines in the case of bone marrow transplants **treated** with DSG. Furthermore, it was of note that DSG modulated hematopoiesis and stimulated the production of **thrombopoietin** (**TPO**)-like cytokine(s) as well as interleukin-3 (IL-3).

L21 ANSWER 13 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 94239324 EMBASE
TI **Thrombopoietin** from human embryonic kidney cells causes increased thrombocytopoiesis and decreased **erythropoiesis** in mice.
AU Sullivan P.S.; Freedman M.S.; McDonald T.P.
CS The University of Tennessee, College of Veterinary Medicine, PO Box 1071, Knoxville, TN 37901-1971, United States
SO COMP. HAEMATOL. INT., (1994) 4/2 (63-69).
ISSN: 0938-7714 CODEN: CHAIEX
CY United Kingdom
DT Journal
FS 025 Hematology
029 Clinical Biochemistry
LA English
SL English
AB Recent studies have shown that large doses of **erythropoietin** (**EPO**) **administered** daily over a 7-day period elevate **erythropoiesis** and lead to marked thrombocytopenia. Conversely, anaemia was found in mice following stimulation of thrombocytopoiesis by an acute thrombocytopenic episode. Although **erythropoiesis** and thrombocytopoiesis have been studied in mice after **treatment** with either hypoxia or **EPO** injection, only the effects of endogenous **thrombopoietin** (released after an acute episode of thrombocytopenia caused by an injection of antiplatelet serum) on **erythropoiesis** have been investigated. Therefore, we injected mice with a potent source of **thrombopoietin** and

evaluated both thrombocytopoiesis and **erythropoiesis** at 3 and 5 days after **treatment**. The data show that **thrombopoietin** elevated thrombocytopoiesis with a concomitant reduction in **erythropoiesis**. We found significantly elevated percentage 35s incorporation into platelets, platelet sizes, and total circulating platelet masses following **thrombopoietin** injections at both 3 and 5 days; haematocrits, reticulocyte counts, and total circulating red blood cell masses were reduced significantly in these same mice. Compared to controls **treated** with human serum albumin, megakaryocyte size was increased on day 3, and megakaryocyte numbers were elevated on day 5 in mice **treated** with **thrombopoietin**. **Thrombopoietin** did not change the blood volume of mice, but did cause an increase in splenic weight. However, splenic sequestration of red blood cells was not the cause of anaemia in mice **treated** with **thrombopoietin**, since splenectomised mice also showed increased thrombocytopoiesis with decreased **erythropoiesis**. These data agree with previous studies showing an inverse relation between **erythropoiesis** and thrombocytopoiesis, and are consistent with the hypothesis that the erythrocytic and megakaryocytic cell lines are in competition.

L21 ANSWER 14 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 95269710 EMBASE
TI **Thrombopoietin** expands erythroid progenitors, increases red cell production, and enhances erythroid recovery after myelosuppressive **therapy**.
AU Kaushansky K.; Broudy V.C.; Grossmann A.; Humes J.; Lin N.; Hong Ping Ren; Bailey M.C.; Papayannopoulou T.; Forstrom J.W.; Sprugel K.H.
CS Division of Hematology, University of Seattle, Box 357710, Seattle, WA 98195, United States
SO Journal of Clinical Investigation, (1995) 96/3 (1683-1687). ISSN: 0021-9738 CODEN: JCINAO
CY United States
DT Journal
FS 005 General Pathology and Pathological Anatomy
025 Hematology
037 Drug Literature Index
LA English
SL English
AB **Thrombopoietin** (**TPO**), the ligand for the receptor protooncogene c-mpl, has been cloned and shown to be the critical regulator of platelet production. Several features of c-Mpl expression, including its presence on **erythroid cell** lines, and the panmyeloid transformation characteristic of myeloproliferative leukemia (MPL) viral disease led us to investigate whether this receptor-ligand system may play a role in **erythropoiesis**. We report that although **TPO** alone did not support the growth of either early or late erythroid progenitors, it acted in synergy with **erythropoietin** to expand these populations. Moreover, while the effects on **erythropoiesis** in normal animals were modest, **TPO** greatly expanded the number of erythroid progenitors and blood reticulocytes and was associated with accelerated red cell recovery in myelosuppressed mice. Together, these data strongly suggest that

erythroid progenitors respond to **TPO** and that this newly cloned cytokine, critical for platelet production, can augment **erythropoiesis** in states of marrow failure.

L21 ANSWER 15 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 95224071 EMBASE
TI Recombinant haemopoietic growth factors in the newborn - Will they be useful?.
AU Wardrop C.A.J.; Holland B.M.
CS Department of Hematology, Univ. of Wales College of Medicine, Heath Park, Cardiff CF4 4XW, United Kingdom
SO European Journal of Pediatrics, (1995) 154/8 SUUPL. 3 (S13-S14). ISSN: 0340-6199 CODEN: EJPEDT
CY Germany, Federal Republic of
DT Journal
FS 007 Pediatrics and Pediatric Surgery
025 Hematology
037 Drug Literature Index
LA English
SL English
AB In vivo, realisation of the physiological reserve capacity of haemopoiesis depends on stimulation by cytokines, growth factors produced by autologous blood mononuclear cells. These cytokines include **erythropoietin**, granulocyte/macrophage colony stimulating factors, and **thrombopoietin**. In preterm infants, inadequate haemopoietic growth factor production limits haemopoiesis in its response to demands for extra blood cell production in stress situations. Haemopoiesis may also be inhibited by inflammatory disease and by nutritional deficiencies. In infants in intensive care, losses of blood, which contain haemopoietic stem cells and other progenitors, may also impair blood cell production. Recombinant haemopoietic growth factors promise to prevent or correct in part, this haemopoietic inadequacy. Verification of their **therapeutic** roles depends on further improvements in management of the preterm infant. These improvements include the optimisation of nutritional support and, especially in terms of the endowment of blood from the placenta at birth, which strongly influences clinical outcome.

L21 ANSWER 16 OF 19 EMBASE COPYRIGHT 1996 ELSEVIER SCI. B.V.
AN 95113389 EMBASE
TI The regulation of megakaryocytopoiesis.
AU Ellis M.H.; Avraham H.; Groopman J.E.
CS Division of Hematology and Oncology, New England Deaconess Hospital, Harvard Medical School, 1 Deaconess Road, Boston, MA 02215, United States
SO Blood Reviews, (1995) 9/1 (1-6). ISSN: 0268-960X CODEN: BLOREB
CY United Kingdom
DT Journal
FS 016 Cancer
025 Hematology
030 Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
LA English
SL English

AB The process of megakaryocytopoiesis begins with the commitment of a pluripotent hematopoietic stem cell to a differentiation pathway that culminates in the release of mature platelets into the circulation. A variety of megakaryocyte precursor cells have been identified after stem cell commitment has occurred and these may be recognized by their morphologic or immunophenotypic characteristics. Megakaryocytopoiesis is regulated by a number of cytokines with either stimulatory or inhibitory effects and by a variety of cell-cell interactions. Some factors potentiating platelet development promote the proliferation of megakaryocyte progenitor cells, while others result in their maturation. **Thrombopoietin**, a cytokine with specific megakaryocyte maturational activity recently has been identified as the c-**Mpl ligand**, and it will be evaluated as a **therapeutic** agent in the setting of thrombocytopenia due to impaired megakaryocytopoiesis.

L21 ANSWER 17 OF 19 MEDLINE
AN 96027495 MEDLINE
TI Accelerated reconstitution of platelets and erythrocytes after syngeneic transplantation of bone marrow cells derived from **thrombopoietin** pretreated donor mice.
AU Fibbe W E; Heemskerk D P; Laterveer L; Pruijt J F; Foster D; Kaushansky K; Willemze R
CS Department of Hematology, University Medical Center Leiden, The Netherlands..
NC DK 49855 (NIDDK)
SO BLOOD, (1995 Nov 1) 86 (9) 3308-13.
Journal code: A8G. ISSN: 0006-4971.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9602
AB The recent cloning of the ligand of the c-Mpl hematopoietin receptor has indicated a major role for this cytokine in the development of megakaryocytes. In this study we have applied c-**Mpl ligand** (**thrombopoietin** [**TPO**]) in the setting of syngeneic transplantation in an attempt to accelerate the reconstitution of platelets. Donor mice were **treated** with 20 kilounits (kU)/d **TPO** intraperitoneally (ip) for 5 days. This resulted in a 2.5-fold increment in platelet counts from 1,119 x 10(9)/L to 2,582 x 10(9)/L (mean, n = 7). Total numbers of hematopoietic progenitor cells in bone marrow (BM) and spleen, as assessed in a colony-forming unit-granulocyte erythroid monocyte macrophage (CFU-GEMM) colony assay (55.3 v 38.6 x 10(3) CFU/femur; 27.3 v 16.3 x 10(3) CFU/spleen, mean, n = 7) as well as total numbers of burst-forming unit-erythroid (BFU-E) (24.0 v 16.4 x 10(3)/femur; 10.2 v 1.9 x 10(3)/spleen, mean, n = 7), were significantly higher in **TPO-treated** donors than in saline-**treated** controls. Female Balb-C mice were lethally (8.5 Gy) irradiated and transplanted with 10(5) BM cells. After transplantation, groups of mice were **treated** with recombinant murine **TPO** at a dose of 20 to 30 kU/d ip or subcutaneously (SC) for 5 to 14 days. Using this dose and schedule, **TPO** did not stimulate the recovery of platelets in comparison with control animals transplanted with equal cell numbers

but given vehicle alone. In other experiments, 10(5) BM cells were procured from **TPO-treated** donor mice and transplanted into lethally irradiated recipient mice. In comparison with animals transplanted with an equal number of BM cells derived from saline-**treated** controls, recipients of **TPO-treated** BM cells had significantly faster platelet recovery and higher platelet nadir counts (88 v 30 x 10(9)/L, mean, n = 20). Transplantation of **TPO-treated** BM cells also resulted in an accelerated recovery of erythrocytes and increased erythrocyte nadir counts (7.2 v 5.0 x 10(12)/L, mean, n = 20). At the day of platelet nadir (day 12 after transplantation) these animals had higher numbers of BFU-Es (770 v 422, mean, n = 5) in the marrow and also had higher reticulocyte counts (44 / 1000 v 8 / 1000 mean, n = 5) in the blood. Therefore, the accelerated recovery of erythrocytes may be a direct effect of **TPO** on **erythropoiesis**.(ABSTRACT TRUNCATED AT 400 WORDS)

L21 ANSWER 18 OF 19 BIOSIS COPYRIGHT 1996 BIOSIS
AN 95:293868 BIOSIS
DN 98308168
TI In vivo administration of stem cell factor enhances both proliferation and maturation of murine megakaryocytes.
AU Grossi A; Vannucchi A M; Bacci P; Longo G; Rafanelli D; Alterini R; Ferrini P R
CS Div. Hematol., Univ. Florence USL 10/D, Morgagni 85, 50134 Florence, Italy
SO Haematologica 80 (1). 1995. 18-24. ISSN: 0390-6078
LA English
AB Background: Stem cell factor (SCF) has already been shown to participate in the regulation of erythro- and granulopoiesis. The aim of this study was to define the possible role of SCF in the regulation of megakaryocytopoiesis. Methods: Stem cell factor activity has been assessed in an in vivo murine model, in which different doses of the factor were either given alone or in association with recombinant human **erythropoietin** (rhEpo). Mice were sacrificed after a six-day **treatment** to evaluate the effect of SCF on the number of bone marrow and spleen colony-forming units-megakaryocyte (CFU-Mk), and after a two-day **treatment** for evaluation of **thrombopoietin**-like activity. Results: We found that SCF induces a dose-related increase in the number of CFU-Mk in both the bone marrow and spleen of the **treated** mice, and that in the range of the doses used (from 25 to 200 mg/kg/day) the greatest activity was observed when a dose of 200 mg/kg/day was injected. The effect was enhanced by adding rhEpo to optimal SCF concentrations. SCF also stimulated megakaryocyte maturation as assessed by the megakaryocyte number, the size of acetylcholinesterase-positive cells, "Sulphur (35S) incorporation into the newly formed platelets. All these parameters were only minimally affected by the addition of rhEpo. Conclusions: These data suggest that SCF participates in the regulation of megakaryocytopoiesis and that its administration might have a role in the **treatment** of disorders of platelet production.

L21 ANSWER 19 OF 19 SCISEARCH COPYRIGHT 1996 ISI (R)
AN 95:198953 SCISEARCH
GA The Genuine Article (R) Number: QL668
TI CASTRATION DECREASES THROMBOCYTOPOIESIS AND TESTOSTERONE RESTORES

PLATELET PRODUCTION IN CASTRATED BALB/C MICE - EVIDENCE THAT TESTOSTERONE ACTS ON A BIPOTENTIAL HEMATOPOIETIC PRECURSOR CELL

AU SULLIVAN P S (Reprint); JACKSON C W; MCDONALD T P
CS CTR DIS CONTROL & PREVENT, DIV HIV AIDS, 1600 CLIFTON RD, MAILSTOP E-47, ATLANTA, GA, 30333 (Reprint); UNIV TENNESSEE, COLL VET MED, DEPT ANIM SCI, KNOXVILLE, TN, 37901; ST JUDE CHILDRENS HOSP, DEPT HEMATOL ONCOL, MEMPHIS, TN, 38105
CYA USA

SO JOURNAL OF LABORATORY AND CLINICAL MEDICINE, (MAR 1995) Vol. 125, No. 3, pp. 326-333.
ISSN: 0022-2143.
DT Article; Journal
FS LIFE; CLIN
LA ENGLISH
REC Reference Count: 30
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB BALB/c male mice have higher platelet counts than female mice of the same strain. To test the hypothesis that testosterone influences platelet production, we evaluated indices of both red blood cell and platelet production in intact merle BALB/c mice, In male mice 4 week after castration, and in castrated mice **administered** maintenance doses of testosterone as testosterone propionate. As predicted, castration resulted in decreased hematocrit and body weight in BALB/c mice. Body weights and hematocrits returned to noncastrated levels after 2 and 7 days, respectively, of administration of testosterone. Total circulating red blood cell mass and total circulating red blood cell count were both decreased by castration and were returned to control (noncastrated) levels after 2 days of testosterone **therapy**. Reticulocyte counts were not changed by castration, but they increased above counts of uncastrated and castrated control mice after 3 days of testosterone administration. White blood cell (WBC) numbers were unaffected by castration or testosterone administration. Additionally, platelet count (956 vs 834 x 10(3)/mu l), platelet size (3.87 vs 3.75 mu m(3)), sulfur 35 incorporation into platelets (6.36 vs 4.87 x 10(-3)%), mean megakaryocyte ploidy (17.43N vs 16.89N), total circulating platelet mass (TCPM) (490 vs 379 x 10(8) mu m(3)), and total circulating platelet count (TCPC) (131 vs 103 x 10(7)) were significantly ($p < 0.05$) decreased in castrated mice as compared with intact control mice. Administration of daily subcutaneous injections of testosterone (0.5 mg/day) to castrated mice resulted in a return to control (noncastrated) values of mean megakaryocyte ploidy and TCPM (after 2 days of **treatment**); platelet size, platelet count, and TCPC (after 3 days of **treatment**); and percentage of S-35 incorporation into platelets (after 5 days of **treatment**). Thus these delta support the conclusion that testosterone has a positive influence on thrombocytopoiesis. In contrast to late-acting stimulators of **erythropoiesis** (such as **erythropoietin** and thyroxine) that cause competitive reduction in platelet production, testosterone in this work increased both red cell and platelet production in male castrates with no effect on WBC number. We speculate that this testosterone-induced increase in both **erythropoiesis** and thrombocytopoiesis is likely due to the stimulation of bipotential precursor cells that can differentiate along either the erythroid or megakaryocyte differentiation pathways.

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=> file hom;d his
FILE 'HOME' ENTERED AT 15:22:15 ON 02 APR 96


     (FILE 'HOME' ENTERED AT 14:15:27 ON 02 APR 96)
               DEL HIS

     FILE 'HCAPLUS' ENTERED AT 14:51:19 ON 02 APR 96
               E KAUSHANSKY KENNETH/AU,IN
L1            68 S E30-33
L2             7 S L1 AND TPO/IA,IT,ST
L3           808 S ( 9014-42-0 OR THROMBOPOIETIN OR TPO)/IA,IT,ST
L4          5579 S ( 11096-26-7 OR  ERYTHROPOIETIN# OR EPO)/IA,IT,ST
L5            62 S L3 AND L4
L6            57 S L5 NOT L1
L7         11613 S (HEMATOPOIESIS OR ERYTHROPOIESIS)/IA,IT,ST
L8            24 S L6 AND L7
L9            24 SORT L8 PY

     FILE 'HCAPLUS' ENTERED AT 14:58:39 ON 02 APR 96

     INDEX 'MEDLINE, EMBASE, BIOSIS, WPIDS, IFIPAT, BIOTECHDS, DISSABS,
     CONFSCI, LIFESCI, SCISEARCH, JAPIO, JICST-EPLUS' ENTERED AT
     15:00:18 ON 02 APR 96
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            8860   FILE EMBASE
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             105   FILE IFIPAT
             364   FILE BIOTECHDS
             161   FILE DISSABS
             380   FILE CONFSCI
             876   FILE LIFESCI
            7584   FILE SCISEARCH
              95   FILE JAPIO
            2244   FILE JICST-EPLUS
L10             QUE (11096-26-7 OR ERYTHROPOIETIN# OR EPO)
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                SEA ( 9014-42-0 OR THROMBOPOIETIN OR TPO OR MPL LIGAND OR
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            1116   FILE MEDLINE
             974   FILE EMBASE
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              75   FILE WPIDS
              27   FILE IFIPAT
              34   FILE BIOTECHDS
              65   FILE DISSABS
              37   FILE CONFSCI
             307   FILE LIFESCI
             846   FILE SCISEARCH
              61   FILE JAPIO
             163   FILE JICST-EPLUS
L11             QUE (9014-42-0 OR THROMBOPOIETIN OR TPO OR MPL LIGAND OR
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                 SEA L10 AND L11
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               80   FILE MEDLINE
               75   FILE EMBASE
               68   FILE BIOSIS
                 SEA L10 AND L11 AND (TREAT? OR THERAP? OR ADMINISTER?)
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               28   FILE MEDLINE
                 SEA L10 AND L11 AND (TREAT? OR THERAP? OR ADMINISTER?) AN
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               12   FILE MEDLINE
               13   FILE EMBASE
                8   FILE BIOSIS
                1   FILE WPIDS
                1   FILE LIFESCI
                6   FILE SCISEARCH
L12             QUE L10 AND L11 AND (TREAT? OR THERAP? OR ADMINISTER?) AN
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     FILE 'MEDLINE'

     FILE 'EMBASE, MEDLINE, BIOSIS, SCISEARCH, WPIDS, LIFESCI' ENTERED
     AT 15:12:33 ON 02 APR 96
     FILE 'EMBASE'
L13           13 S L12
     FILE 'MEDLINE'
L14           12 S L12
     FILE 'BIOSIS'
L15            8 S L12
     FILE 'SCISEARCH'
L16            6 S L12
     FILE 'WPIDS'
L17            1 S L12
     FILE 'LIFESCI'
L18            1 S L12
     TOTAL FOR ALL FILES
L19           41 S L12
L20           19 DUP REM L19 (22 DUPLICATES REMOVED)
L21           19 SORT L20 PY

     FILE 'HOME' ENTERED AT 15:22:15 ON 02 APR 96
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=> s (thrombopoietin or TPO or TSP or mpl ligand)

330 THROMBOPOIETIN
488 TPO
987 TSP
333 MPL
32471 LIGAND
35 MPL LIGAND
(MPL(W)LIGAND)
L1 1752 (THROMBOPOIETIN OR TPO OR TSP OR MPL LIGAND)

=> s l1 and (administ? or therapy? or treat?)

770198 ADMINIST?
1296627 THERAPY?
1058911 TREAT?

L2 299 L1 AND (ADMINIST? OR THERAPY? OR TREAT?)

=> d l2 200-299 bib ab

L2 ANSWER 200 OF 299 MEDLINE
AN 89197416 MEDLINE
TI The relative importance of Ah versus H-2 genotype on Trichinella resistance following exposure to 3-methylcholanthrene.
AU Johnson B E; Dietert R R; Wassom D L
CS Department of Poultry and Avian Science, New York State College of Agriculture, Cornell University, Ithaca 14853..
NC AI-17079
ES07052
SO INTERNATIONAL JOURNAL OF IMMUNOPHARMACOLOGY, (1989) 11 (2) 217-27.
Journal code: GRI. ISSN: 0192-0561.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8907
AB The relative influence of Ah vs H-2 genotype on the outcome of Trichinella spiralis (***Tsp***) infections of mice was examined following methylcholanthrene (MC) ***treatment*** . Female mice of four inbred strains were ***treated*** with MC and infected 24 h later with ***Tsp*** muscle larvae. The strains, with their respective major histocompatibility complex (MHC) haplotype, aryl hydrocarbon hydroxylase responsiveness (Ah phenotype) and level of susceptibility to ***Tsp*** infection, were: C3HeB/FeJ (C3), H-2k, Ahb, ***Tsp*** susceptible; C57BL/10.BR (B10.BR), H-2k, Ahb, ***Tsp*** susceptible; C57BL/10.Q (B10.Q), H-2q, Ahb, ***Tsp*** resistant; and AKR/J (AK), H-2k, Ahd, ***Tsp*** resistant. The proliferative response of splenic lymphocytes to crude ***Tsp*** L1 stage antigen was significantly depressed in all MC- ***treated*** groups, with the exception of the B10.BR strain. MC ***administered*** at 40 mg/kg impaired the ability of C3 and B10.Q mice to eliminate adult worms. At 80 mg/kg, C3 strain mice were also impaired, as well as AK strain mice. The fecundity of female worms recovered from B10 or AK strain mice was not significantly altered by MC ***treatment*** , although female worms from ***treated*** C3 mice exhibited increased fecundity on day 9 post infection. Muscle larvae burdens of MC- ***treated*** B10 and C3 mice were elevated, while those of AK strain mice were unaffected. These data suggest that with acute exposures to MC, the immunogenetic resistance or susceptibility of a given mouse strain may have a more pronounced effect on immune depression and the severity of ***Tsp*** infection than does the Ah phenotype.

L2 ANSWER 201 OF 299 MEDLINE
AN 89156023 MEDLINE
TI Rapid progression of tracheal stenosis associated with tracheopathia osteo-chondroplastica.
AU Molloy A R; McMahon J N
CS Intensive Care Unit, Bristol Royal Infirmary, UK..
SO INTENSIVE CARE MEDICINE, (1988) 15 (1) 60-2.
Journal code: H2J. ISSN: 0342-4642.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8906
AB Tracheopathia osteochondroplastica (***TPO***) is a rare, but increasingly recognised condition in which there is accumulation of calcium phosphate with benign submucous proliferation of cartilage and bone beneath the tracheal mucosa, often with squamous metaplasia of the mucosal columnar epithelium. This condition is usually asymptomatic, but may be slowly progressive, causing haemoptysis, dry cough and dyspnoea. We report a case of ***TPO*** in which there was rapid progression of tracheal stenosis such that the size of endotracheal tube that the upper airway would accept changed from 8.00 mm to 3.0 mm during a six-week period. This extreme reduction in airway calibre had not been detected on spirometry nine days prior to his final admission. This is the first report of such rapid progression of tracheal stenosis associated with ***TPO*** .

L2 ANSWER 202 OF 299 MEDLINE
AN 89131924 MEDLINE
TI MHC antigens expressed on 3LL metastatic variants: correlation with the expression of a ***TSP*** -180 protein.
AU Sacchi A; Falcioni R; Tibursi G; Apollonj Ghetti C
CS Istituto Regina Elena per lo studio e la cura dei tumori, Roma..
SO ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY, (1988) 233 141-50.
Journal code: 2LU. ISSN: 0065-2598.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8905
AB In attempts to correlate metastatic potential with specific properties of tumor cells, homogeneous subpopulations, which are endowed with low or high metastatic potential, have been selected from Lewis lung carcinoma (3LL). In particular, since cell surface constituents are possibly involved in the metastatic process, changes in antigen expression have been correlated with the metastatic potential of 3LL variants. In this view, we quantitated the expression of MHC (Db,Kb) antigens and of a tumor specific protein (***TSP***) identified by the monoclonal antibody (MoAb) 135-13C on some "in vitro" and "in vivo" variants of 3LL. The MoAb 135-13C was found to recognize a ***TSP*** -180 protein that appears on the cell surface of several murine carcinomas, but is not detected on normal cells in culture. Studies of the MHC expression on these variants, by the use of the indirect immunofluorescent staining or the direct binding of the MoAb to H-2Db (28-14-8) and the MoAb to H-2Kb (28-13-3), demonstrate that "in vivo" and "in vitro" 3LL variants which, are endowed with a higher metastatic potential, express on the cell surface a higher amount of the Db antigen. By contrast, all the 3LL lines have few cells recognized by the MoAb to H-2Kb and express low amounts of this antigen on the cell surface. The direct binding to different tumor lines and the analysis of the immunoprecipitates from the cell lysates by the use of the MoAb 135-13C demonstrate that the ***TSP*** -180 protein is highly expressed on 3LL cells which possess high capacity to metastasize to the lung. The variations induced in 3LL metastatic phenotype by the injection of the variant lines in allogeneic mice (Balb/c, C3HeB:H-2d,H-2k, respectively) or after ***treatment*** with the specific MoAb 135-13C have, also, been studied. An attempt was made to correlate the changes in 3LL metastatic phenotype with the expression of the ***TSP*** -180 protein and of the MHC antigens. We conclude that a high expression on the cell surface of the Db antigen and of the ***TSP*** -180 protein, is associated with a high malignant phenotype of 3LL tumor cells.

L2 ANSWER 203 OF 299 MEDLINE
AN 89106893 MEDLINE
TI Trospectomycin, a novel spectinomycin analogue: antibacterial activity and preliminary human pharmacokinetics.
AU Zurenko G E; Ford C W; Novak E
CS Infectious Diseases Research, Upjohn Company, Kalamazoo, MI 49001..
SO DRUGS UNDER EXPERIMENTAL AND CLINICAL RESEARCH, (1988) 14 (6) 403-9.
Journal code: EBM. ISSN: 0378-6501.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8905

AB Trospectomycin (***TSP*** ; U-63366F) is a novel spectinomycin (SP) analogue with broad-spectrum antibacterial activity. The in vitro activity of the analogue was compared to that of SP against approximately 400 bacterial isolates. The in vivo activity of the compound was assessed using experimental infection models for both Gram-positive and Gram-negative facultative bacteria. The preliminary human pharmacokinetics of ***TSP*** were evaluated following single-dose i.v. or i.m. ***administration*** . ***TSP*** was more active in vitro than SP (2 to 32-fold) against strains of numerous bacterial species, including staphylococci, streptococci, Haemophilus influenzae, Branhamella catarrhalis, Neisseria gonorrhoeae, Proteus spp., Bacteroides spp., Gardnerella vaginalis and Chlamydia trachomatis. The activity of ***TSP*** for most species of the family Enterobacteriaceae was comparable to that of SP. ***TSP*** was more active than SP (2 to 32-fold) in curing experimental infections due to streptococci, Salmonella typhi, Serratia marcescens, Klebsiella pneumoniae and Haemophilus influenzae. ***TSP*** was well-absorbed following both i.v. and i.m. ***administration*** . Pharmacokinetic analysis of microbiological assay data for the 1000 mg dose yielded the following mean values for the i.v. and i.m. routes, respectively: Cmax = 81.2, 28.7 micrograms/ml; serum half-life = 2.2, 2.2 h; Tmax = 25, 75 min; and AUC = 156.6, 116.2 h micrograms/ml. Pharmacokinetic analysis of assay data derived using the more sensitive HPLC assay revealed the biphasic nature of trospectomycin elimination, highlighted by a short apparent serum half-life (2.2 h) and a prolonged tissue half-life (approximately 36 h). ***TSP*** inhibits a variety of clinically important organisms, including agents of sexually transmitted diseases and pelvic inflammatory disease, and demonstrates favourable pharmacokinetic properties.(ABSTRACT TRUNCATED AT 250 WORDS)

L2 ANSWER 204 OF 299 MEDLINE
AN 89062547 MEDLINE
TI Identification of platelet membrane thrombospondin binding molecules using an anti-thrombospondin antibody.
AU Kieffer N; Nurden A T; Hasitz M; Titeux M; Breton-Gorius J
CS INSERM U91/CNRS UA607, Hopital Henri Mondor, Creteil, France..
SO BIOCHIMICA ET BIOPHYSICA ACTA, (1988 Dec 15) 967 (3) 408-15.
Journal code: A0W. ISSN: 0006-3002.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Cancer Journals; Priority Journals
EM 8903
AB A rat monoclonal IgG2a antibody, 5G11, was raised against native human platelet thrombospondin (***TSP***). Western blot analysis revealed that 5G11 bound (i) to ***TSP*** before and after disulfide reduction, and (ii) to a 15-kDa fragment released after prolonged trypsin digestion. Crossed immunoelectrophoresis confirmed that the binding epitope was expressed in the presence of Ca2+ and after ***treatment*** of ***TSP*** with EDTA. Since 5G11 had no effect on platelet aggregation, the antibody was used to immunoprecipitate Ca2+-dependent and Ca2+-independent ***TSP*** -binding molecules on the surface of thrombin-activated surface-labeled 125I-platelets. The experimental basis was that ligand-receptor interactions are of high affinity and that anti-ligand antibodies should precipitate the ligand-receptor complex. With platelets activated in the presence of EDTA, 5G11 predominantly precipitated a 125I-labeled band of Mr 88,000, identified as glycoprotein (GP) IV. In contrast, in the presence of 2 mM Ca2+ and 1 mM Mg2+, 5G11 precipitated a complex of five radiolabeled proteins, among which GPIIb, GPIIIa and GPIV were the most prominent.

L2 ANSWER 205 OF 299 MEDLINE
AN 89055194 MEDLINE
TI Tropical spastic paraparesis. A clinical study of 50 patients from Tumaco (Colombia) and review of the worldwide features of the syndrome.
AU Roman G C; Roman L N
CS Department of Neurology, Texas Tech University Health Sciences, Center School of Medicine, Lubbock 79430..
SO JOURNAL OF THE NEUROLOGICAL SCIENCES, (1988 Oct) 87 (1) 121-38.
Journal code: JBJ. ISSN: 0022-510X.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8903
AB Tropical spastic paraparesis (***TSP***) is a chronic and slowly progressive endemic myelopathy occurring in geographical isolates in the Caribbean, South India, South Africa, the Seychelles, and Colombia. A detailed clinical and laboratory study was performed on 50 ***TSP*** patients from the island of Tumaco (Colombia), in a tropical rain forest area. Most patients were middle-aged blacks, 29 (58%) men and 21 women. In every case, neurological examination confirmed the presence of pyramidal signs in the lower limbs, plus, in 58%, moderate decrease in vibratory perception distally in the feet, bilaterally and symmetrically. Absent ankle jerks were found in 28%. Slow onset and chronic progression were documented in most patients. Positive treponemal serology, from yaws infection in childhood, was found in the serum in 92%, and in 19% also in the cerebrospinal fluid (CSF). No pleocytosis was documented on 27 CSF samples, but increased protein content occurred in 86%, with elevation of gamma-globulins in 78%. ***Treatment*** of 20 patients with high doses of penicillin produced no change in the clinical picture. ***TSP*** emerges from this review of the literature as a remarkably homogeneous clinical entity worldwide. A retrovirus-human T-lymphotropic virus type 1 (HTLV-1)--has been recently implicated as a possible etiology of the syndrome.

L2 ANSWER 206 OF 299 MEDLINE
AN 88278256 MEDLINE
TI Immunochemical identification of a thrombospondin-like structure in an arterial microfibrillar extract.
AU Fauvel-Lafeve F; Legrand Y J
CS Unite de Recherches sur la Thrombose et l'Hemostase, U 150 de l'INSERM, UA 334 CNRS, Hopital Saint-Louis, Paris..
SO THROMBOSIS RESEARCH, (1988 Apr 15) 50 (2) 305-16.
Journal code: VRN. ISSN: 0049-3848.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8810
AB Arterial microfibrils contain a 128 Kd collagenase and pepsin resistant glycoprotein (GP 128) essential for their ability to induce platelet aggregation. A previous report (Fauvel F. et al, (1984) Biochem. Biophys. Res. Comm., 123, 114-120) showed that GP 128 and thrombospondin (***TSP***) synthetized by endothelial cells each inhibited the aggregation of platelets by microfibrils and not by collagen. We used a monospecific antiplatelet ***TSP*** IgG in an immunoblotting assay for the identification of a ***TSP*** -like structure in untreated, collagenase- ***treated*** and pepsin- ***treated*** arterial microfibrils. The only constituent recognized in the three samples of microfibrils was GP 128. Fab fragments of this IgG provoked a dose dependent inhibition of the microfibril induced platelet aggregation (50% inhibition with 0.25 mg, 100% inhibition with 1 mg); in contrast, they did not affect collagen induced aggregation. The results indicate that a glycoprotein constituent with a thrombospondin-like antigenicity is involved in the thrombogenic properties of arterial microfibrils.

L2 ANSWER 207 OF 299 MEDLINE
AN 88269161 MEDLINE
TI [Intolerance to metabisulfites in asthma induced by aspirin]. Intolerance aux metabisulfites dans l'asthme induit par l'aspirine.
AU Sabbah A; Drouet M; Bonneau J C; Le Sellin J; Ernouit C
SO ALLERGIE ET IMMUNOLOGIE, (1987 Oct) 19 (8 Suppl) 19-23.
Journal code: AEI. ISSN: 0397-9148.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
LA French
FS Priority Journals
EM 8810
AB 38% of subjects who presented with aspirin (Acetyl-salicylic acid AAS)-included asthma were also found to be intolerant to metabisulphites (MBS). The diagnosis was based on interrogation and an oral provocation test (***TPO***), to which the majority of the responses were similar, immediate and/or delayed. Atopy and other immunological tests are not involved in this type of asthma, which like AAS is has an intolerance mechanism.

L2 ANSWER 208 OF 299 MEDLINE
AN 88269151 MEDLINE
TI [Oral provocation tests (OPT) in the skin pathology of children]. Les tests de provocation orale (***TPO***) dans la pathologie cutanee de l'enfant.
AU Sayag J; Lagrange B
CS C.H.U. Timone Service Dermatologique, Marseille..

SO ALLERGIE ET IMMUNOLOGIE, (1987 Sep) 19 (7) 294-302. Ref: 23
Journal code: AEI. ISSN: 0397-9148.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA French
FS Priority Journals
EM 8810
AB The purpose of oral food challenges is to detect food intolerance. Challenges of food additives and drugs are not often used in children. The authors report methods and protocols that they used for food, food additives and contaminants and emphasize the potential dangers of these tests. Atopic diseases and chronic urticaria are the principal indications. Cow's milk, eggs and fish are the allergens that are most often incriminated. Oral challenges are only to be done as part of an integrated investigation together with skin tests, in vitro tests and a study of intestinal permeability. Food avoidance and ***therapy*** should be decided after the challenge data are available.

L2 ANSWER 209 OF 299 MEDLINE
AN 88257296 MEDLINE
TI Thermospray liquid chromatographic-mass spectrometric method for the analysis of metribuzin and its metabolites.
AU Parker C E; Geeson A V; Games D E; Ramsey E D; Abusteit E O; Corbin F T; Tomer K B
CS Laboratory of Molecular Biophysics, National Institute of Environmental Health Sciences, Research Triangle Park, NC 27709..
SO JOURNAL OF CHROMATOGRAPHY, (1988 Apr 22) 438 (2) 359-67.
Journal code: HQF. ISSN: 0021-9673.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8810
AB A thermospray liquid chromatographic-mass spectrometric (***TSP*** LC-MS) method has been developed for the analysis of the herbicide metribuzin and its three major metabolites in plant tissue. Metribuzin and its metabolites exhibited widely varying sensitivities in positive-ion ***TSP*** , with metribuzin being the most sensitive and deaminated diketo metribuzin being the least sensitive. All four compounds of interest were detected in an extract of a soybean plant which had been ***treated*** with metribuzin.

L2 ANSWER 210 OF 299 MEDLINE
AN 88255076 MEDLINE
TI Induction of T cell serine proteinase 1 (***TSP*** -1)-specific mRNA in mouse T lymphocytes.
AU Simon H G; Fruth U; Eckerskorn C; Lottspeich F; Kramer M D; Nerz G; Simon M M
CS Max-Planck-Institut fur Immunobiologie, Freiburg, FRG..
SO EUROPEAN JOURNAL OF IMMUNOLOGY, (1988 Jun) 18 (6) 855-61.
Journal code: EN5. ISSN: 0014-2980.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8810
AB An oligonucleotide probe corresponding to nucleotides of a cDNA encoding the T cell-associated proteinase 1 (***TSP*** -1) was chosen to study the induction and expression of ***TSP*** -1-specific transcripts in mouse T lymphocytes and tissues. We demonstrate that ***TSP*** -1 mRNA is only expressed in activated T lymphocytes and is absent from all mouse tissues tested including those containing resting mature T lymphocytes. Expression of the ***TSP*** -1 gene was observed in T lymphocytes in vitro in response to either phorbolester (phorbol 12-myristate 13-acetate), Ca2+ ionophore (A23187), lectin or alloantigen. In general, ***TSP*** -1 mRNA appeared and peaked later compared to interleukin 2 transcripts. Furthermore, ***TSP*** -1 mRNA was inducible in vitro in both Ly-2+ and L3T4+ lymphocyte populations ***treated*** with alloantigen and/or lectin. The transcription of the ***TSP*** -1 gene was always accompanied by the expression of proteinase activity. High expression of ***TSP*** -1 transcripts was also observed in in vivo derived T effector cells specific for lymphocytic choriomeningitis virus. However, ***TSP*** -1 mRNA was predominantly associated with virus-specific Ly-2+ T cells and correlated with their proteinase and cytolytic activities. The data suggest that ***TSP*** -1 gene transcription is a useful marker to characterize T effector cells in vitro and in vivo.

L2 ANSWER 211 OF 299 MEDLINE
AN 88241185 MEDLINE
TI Thyroid function in fasting rats: variations in 131I uptake and transient decrease in peroxidase activity.
AU Moura E G; Ramos C F; Nascimento C C; Rosenthal D; Breitenbach M M
CS Laboratorio de Fisiologia Endocrina, Universidade do Estado do Rio de Janeiro, Brasil..
SO BRAZILIAN JOURNAL OF MEDICAL AND BIOLOGICAL RESEARCH, (1987) 20
(3-4) 407-10.
Journal code: BOF. ISSN: 0100-879X.
CY Brazil
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8809
AB Serum thyroxine and triiodothyronine, radioiodide thyroid uptake and thyroid peroxidase (***TPO***) activity were studied over a 2 to 5 day period in fasting rats ***treated*** (F+) or not (F-) with TSH. In F- rats, ***TPO*** activity was transiently decreased on the 3rd day, whereas in F+ it was always higher than in controls. On the 5th day, the 2 h thyroid uptake of 131I decreased in F-, while the 24 h uptake increased in both F- and F+. Serum T3 and T4 decreased in both fasting groups. Thus, not all effects of fasting on rat thyroid function are reverted by TSH ***administration*** , suggesting intrinsic impairment of glandular function.

L2 ANSWER 212 OF 299 MEDLINE
AN 88229025 MEDLINE
TI Immunization against experimental rabbit cysticercosis using liposome-associated antigen preparations.
AU Craig P S; Zumbuehl O
CS Department of Parasitology, Liverpool School of Tropical Medicine, England..
SO JOURNAL OF HELMINTHOLOGY, (1988 Mar) 62 (1) 58-62.
Journal code: IBR. ISSN: 0022-149X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8809
AB Rabbits were vaccinated once, by subcutaneous and intradermal injection, with sonicates of oncospheres (***TpO***) or conditioned media from in vitro maintained mature metacestodes (TpMcES) of Taenia pisiformis. Extracts were either incorporated into or mixed with unilamellar liposomes (reverse phase evaporative vesicles) or emulsified in Freund's Incomplete Adjuvant (FIA). Control groups received liposomes or FIA without antigen, or antigen preparation without adjuvant. Rabbits were challenged orally two weeks after vaccination with approximately 1500 eggs of T. pisiformis and necropsied eight weeks after challenge. A mean of 155 cysts was recovered from seven control rabbits. A 67% reduction in peritoneal cyst numbers was obtained in ***TpO*** -IFA vaccinated rabbits compared to 75% for the ***TpO*** -liposome entrapped group. The highest level of protection (86%) was obtained when ***TpO*** was mixed with but not entrapped in liposomes. Only 32% and 39% reduction in peritoneal cyst numbers was obtained after immunizing with the TpMcES preparation in liposomes or IFA respectively, however greater than 85% of peritoneal metacestodes were dead (necrotic or calcified) and suggests a different immune response than occurs after vaccination with oncosphere extracts. Specific anti-oncospheral or anti-metacestode ES antibody (IgG) responses at two weeks post vaccination were similar in rabbits immunized with liposome or IFA associated extracts.

L2 ANSWER 213 OF 299 MEDLINE
AN 88226446 MEDLINE
TI The inhibition of PB125I formation in calf thyroid caused by 14-iodo-15-hydroxy-eicosatrienoic acid is due to decreased H2O2 availability.
AU Krawiec L; Chazenbalk G D; Puntarulo S A; Burton G; Boveris A; Valsecchi R M; Pisarev M A
CS Depto. Aplicaciones Biologicas, Comision Nacional de Energia Atomica, Buenos Aires, Argentina..
SO HORMONE AND METABOLIC RESEARCH, (1988 Feb) 20 (2) 86-90.
Journal code: GBD. ISSN: 0018-5043.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English

FS Priority Journals
EM 8809
AB Previous work from our laboratory has shown that 14-iodo-15-hydroxy-5,8,11-eicosatrienoic acid (I-HO-A) is a potent inhibitor of iodine organification in calf thyroid slices. The present studies were performed in order to clarify the mechanism of this action. Incubation of thyroid slices with 10(-4)M I-HO-A caused a 47 and 53% decrease in PB125I formation after 30 and 60 min incubation, respectively. In a series of experiments an inverse relationship between the degree of inhibition caused by I-HO-A and total iodine content and basal iodoprotein formation was observed. Chromatographic analysis of the labeled compounds showed a significant decrease in 125I incorporation into MIT, DIT, T3 and total iodolipid. The site of the inhibitory effect of I-HO-A was then sought. ***TPO*** was measured by three different methods. When ***TPO*** was solubilized from I-HO-A ***treated*** slices, no change in enzymatic activity was observed. Moreover, the same lack of action was found when solubilized ***TPO*** was incubated with I-HO-A. The production and release of H2O2 into the incubation medium was measured by chemiluminiscence technique. In control slices the values increased during the first 10 min and reached a plateau. Pretreatment of the slices with 10(-4)M KI caused a 51% inhibition, while the same concentration of I-HO-A produced a 59% inhibition. The possibility that I-HO-A might exert its action through a putative protein inhibitor was also explored. Incubation of slices with 10(-5)M I-HO-A caused a 46% decrease in PB125I formation and addition of actinomycin D or puromycin failed to alter this effect.(ABSTRACT TRUNCATED AT 250 WORDS)

L2 ANSWER 214 OF 299 MEDLINE
AN 88213704 MEDLINE
TI Thrombospondin-induced adhesion of human keratinocytes.
AU Varani J; Nickoloff B J; Riser B L; Mitra R S; O'Rourke K; Dixit V M
CS Department of Pathology, University of Michigan Medical School, Ann Arbor 48109..
NC AM35390
SO JOURNAL OF CLINICAL INVESTIGATION, (1988 May) 81 (5) 1537-44.
Journal code: HS7. ISSN: 0021-9738.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 8808
AB Human epidermal keratinocytes obtained from normal skin attached and spread on thrombospondin (***TSP***)-coated plastic dishes but failed to attach and spread on untreated plastic culture dishes or dishes coated with fibronectin or laminin. These cells produced minimal amounts of immunoreactive ***TSP*** . Keratinocytes established in culture on MCDB 153 medium and maintained for one to three passages in an undifferentiated state by continued cultivation in this low Ca2+-containing medium attached and spread on plastic dishes as well as on ***TSP*** -coated dishes. These cells also secreted significant amounts of ***TSP*** into the culture medium. When the keratinocytes were incubated for one day in MCDB 153 medium supplemented with high Ca2+ or in MEM (which also contains high Ca2+), there was decreased secretion of ***TSP*** into the culture medium concomitant with a reduction in attachment and spreading on plastic culture dishes. Proteolytic fragments of ***TSP*** were examined for stimulation of keratinocyte attachment and spreading. A 140-kd fragment produced by removal of the 25-kd heparin-binding domain had similar activity to the intact molecule while the 25-kd fragment was without effect. Further proteolytic ***treatment*** of the 140-kd fragment gave rise to a fragment consisting of 120 kd and 18-D moieties held together in disulphide linkage. This fragment did not support attachment or spreading. This study reveals that normal epidermal keratinocytes grown under conditions that maintain the undifferentiated state are able to produce ***TSP*** and utilize it as an attachment factor. When keratinocytes are grown under conditions that promote differentiation, ability to produce and utilize ***TSP*** is diminished. Since ***TSP*** is present at the dermal-epidermal junction and because ***TSP*** promotes keratinocyte attachment and spreading, this molecule may play an important role in maintaining normal growth of the basal cell layer and may also participate in reepithelialization during wound repair.

L2 ANSWER 215 OF 299 MEDLINE
AN 88201332 MEDLINE
TI Partial purification and biochemical characterization of human plasma ***thrombopoietin*** .
AU Vannucchi A M; Grossi A; Rafanelli D; Rossi Ferrini P; Ramponi G
CS Department of Hematology, University of Florence, Italy..
SO LEUKEMIA, (1988 Apr) 2 (4) 236-40.
Journal code: LEU. ISSN: 0887-6924.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8808
AB A factor that stimulates the incorporation of 75Selenomethionine into the newly formed platelets of recipient mice (***thrombopoietin*** , ***TPO***) has been partially purified from the plasma of thrombocytopenic patients. The activity was precipitated at 60-80% ammonium sulfate saturation and further purified with hydrophobic interaction chromatography. ***Thrombopoietin*** was retained by concanavalin-A-Sepharose. Using HPLC size-exclusion chromatography, an approximate molecular weight of 40,000 dalton was calculated. The overall purification factor was about 2,100-fold. ***TPO*** was stable in a pH range from 5 to 9 and was heat-sensitive, and the biological activity was destroyed by trypsin ***treatment*** and by dithiothreitol. The partially purified molecule did not stimulate the proliferation of megakaryocyte progenitors in vitro and had no effect on the growth of erythroid or granulocyte-macrophage colonies; when ***administered*** in-vivo, ***TPO*** significantly affected the mean platelet volume and increased the number of small acetylcholinesterase cells in the bone marrow. ***TPO*** appears to be specific for the megakaryocytic lineage and active on the postmitotic compartment of megakaryocytes.

L2 ANSWER 216 OF 299 MEDLINE
AN 88200297 MEDLINE
TI Effect of route of ***administration*** on the development of organophosphate-induced delayed neurotoxicity in 4-week-old chicks.
AU Olson B A; Bursian S J
CS Department of Animal Science, Michigan State University, East Lansing 48824..
SO JOURNAL OF TOXICOLOGY AND ENVIRONMENTAL HEALTH, (1988) 23 (4)
499-505.
Journal code: KAA. ISSN: 0098-4108.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8808
AB The poor absorption of organophosphate delayed neurotoxins through the gastrointestinal tract has been suggested as a reason why young chickens are not susceptible to organophosphate-induced delayed neurotoxicity (OPIDN). In the present study, 4-wk-old White Leghorn chickens were ***administered*** a single dose of 500 mg tri-o-tolyl phosphate (TOTP)/kg body weight or 100 mg o-tolyl saligenin phosphate (***TSP***)/kg body weight via the oral, intramuscular, or intraperitoneal route. In addition, TOTP ***TSP*** were ***administered*** intravenously at 250 and 50 mg/kg body weight, respectively. Forty-eight hours after dosing, half the birds in each group were killed for subsequent determination of whole-brain and sciatic nerve neurotoxic esterase (NTE) activity while the remaining 5 birds per group were observed daily from d 7 through d 21 for development of OPIDN clinical signs. TOTP ***administered*** by the 4 routes generally resulted in whole-brain and sciatic nerve NTE inhibition in excess of 85%. ***TSP*** given via the different routes resulted in 75-84% inhibition of whole-brain NTE activity and 66-79% inhibition of sciatic nerve NTE activity. No birds displayed clinical signs typical of OPIDN during the 21-d test. Thus, the resistance of the young chicken to the delayed effects of organophosphate compounds is due to factors other than the poor absorption of the compound through the gastrointestinal tract or the inability of the bird to convert TOTP to its neuroactive metabolite, ***TSP*** .

L2 ANSWER 217 OF 299 MEDLINE
AN 88198189 MEDLINE
TI Altered metabolism of thrombospondin by Chinese hamster ovary cells defective in glycosaminoglycan synthesis.
AU Murphy-Ullrich J E; Westrick L G; Esko J D; Mosher D F
CS Department of Physiological Chemistry, University of Wisconsin, Madison 53706..
NC HL29586
HD07118
GM33063
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1988 May 5) 263 (13) 6400-6.

Journal code: HIV. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8808
AB We examined the ability of Chinese hamster ovary (CHO) cell mutants defective in glycosaminoglycan synthesis to metabolize 125I-labeled thrombospondin (***TSP***). Wild type CHO cells bound and degraded 125I- ***TSP*** with kinetics similar to those reported for endothelial cells. Both binding and degradation were saturable (half-saturation at 20 micrograms/ml). When the concentration of labeled ***TSP*** was 1-5 micrograms/ml, mutant 745, defective in xylosyltransferase, and mutant 761, defective in galactosyltransferase I, bound and degraded 6- to 16-fold less ***TSP*** than wild type; mutant 803, which specifically lacks heparan sulfate chains, bound and degraded 5-fold less ***TSP*** than wild type; and mutant 677, which lacks heparan sulfate and has increased levels of chondroitin sulfate, bound and degraded 2-fold less ***TSP*** than wild type. Binding and degradation of ***TSP*** by the mutants were not saturable at ***TSP*** concentrations up to 100 micrograms/ml. Bound ***TSP*** was localized by immunofluorescence to punctate structures on wild type and, to a lesser extent, 677 cells. Heparitinase pretreatment of wild type cells caused a 2- to 3-fold decrease in binding and degradation, whereas chondroitinase pretreatment had no effect. Chondroitinase pretreatment of the 677 mutant (deficient heparan sulfate and excess chondroitin sulfate) caused a 2-fold decrease in binding and an 8-fold decrease in turnover, whereas heparitinase pretreatment had no effect. ***Treatment*** of wild type cells with both heparitinase and chondroitinase resulted in a 6- to 8-fold decrease in binding and turnover. These results indicate that cell surface proteoglycans mediate metabolism of ***TSP*** by CHO cells and that the primary effectors of ***TSP*** metabolism are heparan sulfate proteoglycans.

L2 ANSWER 218 OF 299 MEDLINE
AN 88196254 MEDLINE
TI The effects of thrombopoietic activity of rabbit plasma fractions on megakaryocytopoiesis in agar cultures.
AU Kellar K L; Rolovic Z; Evatt B L; Sewell E T; Ramsey R B
CS Division of Host Factors, Centers for Disease Control, Atlanta, Georgia 30333..
SO EXPERIMENTAL HEMATOLOGY, (1988 May) 16 (4) 262-7.
Journal code: EPR. ISSN: 0301-472X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8808
AB A plasma fraction that stimulates platelet production in vivo also stimulates megakaryocytopoiesis in vitro. The plasma activity is attributed to a humoral regulator, ***thrombopoietin*** . Addition of the thrombocytopenic plasma (TP) fraction to an agar system supporting megakaryocyte colonies increased the frequency of colony formation significantly over that stimulated by spleen cell-conditioned medium (SCM). TP had no effect on the size of the colonies and, in the absence of SCM, TP did not stimulate colony formation. In studies of single megakaryocytes, the numbers of small megakaryocytes, specifically those 5-10 microns in diameter, increased significantly after 3 days of incubation with TP alone. SCM supported not an increase in the numbers, but an increase in the proportion of larger (30- to 40-microns) megakaryocytes. A normal plasma fraction contained similar but consistently less activity than fractions containing TP. The findings indicated that TP stimulates differentiation of megakaryocyte precursors from unidentifiable to identifiable cells but does not alone support colony formation. Thus, TP appears to be a potentiator of megakaryocytopoiesis. However, the augmentation of colony frequency by TP further suggests that TP may also play a role in early colony development, either by enhancing progenitor responsiveness to a megakaryocyte colony-stimulating factor or by recruiting additional colony progenitors from a noncycling progenitor population. These studies establish a link between the stimulation of platelet production observed after TP ***administration*** in vivo and the effects of TP on early events in megakaryocytopoiesis.

L2 ANSWER 219 OF 299 MEDLINE
AN 88105031 MEDLINE
TI Regulation of megakaryocytopoiesis by ***thrombopoietin*** .
AU McDonald T P
CS University of Tennessee, College of Veterinary Medicine, Knoxville 37901-1071..
NC HL 14637
SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1987) 509 1-24. Ref: 80
Journal code: 5NM. ISSN: 0077-8923.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals; Cancer Journals
EM 8804
AB It is clear that ***thrombopoietin*** is a major hormonal regulator of megakaryocytopoiesis both in vitro and in vivo, and, thus, blood platelet production. Existing data show that the action, chemical nature, and immunologic properties of ***thrombopoietin*** from HEK cell culture medium and either endogenously produced or exogenously ***administered*** ***thrombopoietin*** from animal sources are similar, if not identical. Absolute identity, however, will require comparisons of amino acid sequences of the two preparations. Recent studies have shown that not only does TSF potentiate the action of meg-CSF, but it also has a direct effect on precursor cells to increase the number of megakaryocytic colonies. Other in vitro work showed that TSF stimulates directly the SAChE+ precursor cells to become mature megakaryocytes and causes FMLC to differentiate into megakaryocytic colonies. In vivo, TSF increases megakaryocyte size and number, it causes an elevation in the number of the SAChE+ precursor cells in mouse marrow and increases the maturation of megakaryocytes. Moreover, TSF increases the endomitosis of megakaryocytes in the marrow of mice, along with elevating the number of megakaryocytic colonies in spleens of lethally irradiated bone marrow reconstituted mice. Platelet production is also stimulated in mice by TSF as evidenced by elevated isotopic incorporation into platelets; it increases platelet sizes, and when ***administered*** in high doses TSF elevates platelet counts. Full development of colonies of megakaryocytes may depend on two growth factors. It has been hypothesized that one factor, meg-CSF, is effective in clonal expansion whereas a second factor is predominately involved in the endomitotic phase of megakaryocyte development. Multifactoral regulation has been observed for the other cell lineages, and a general proposal for hematopoietic development has been outlined by Iscove. In this scheme, specificity of erythropoietin to erythroid cell lineage is indicated. Previous work, however, shows that recombinant erythropoietin can act as a meg-CSF stimulus, indicating that much is yet to be learned about the action of hematopoietic regulatory factors. Although the present study showed that TSF may in some circumstances stimulate an early cell in the megakaryocytic series, its major effect is probably on the more differentiated population, leading to maturation of megakaryocytes and platelet production.(ABSTRACT TRUNCATED AT 400 WORDS)

L2 ANSWER 220 OF 299 MEDLINE
AN 88087731 MEDLINE
TI Enhanced thyroid iodine metabolism in patients with triiodothyronine-predominant Graves' disease.
AU Takamatsu J; Hosoya T; Naito N; Yoshimura H; Kohno Y; Tarutani O; Kuma K; Sakane S; Takeda K; Mozai T
CS Department of Medicine, Osaka Medical College, Japan..
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1988 Jan) 66 (1) 147-52.
Journal code: HRB. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 8804
AB Some patients with hyperthyroid Graves' disease have increased serum T3 and normal or even low serum T4 levels during ***treatment*** with antithyroid drugs. These patients with elevated serum T3 to T4 ratios rarely have a remission of their hyperthyroidism. The aim of this study was to investigate thyroid iodine metabolism in such patients, whom we termed T3-predominant Graves' disease. Mean thyroid radioactive iodine uptake was 51.0 +/- 18.1% (+/- SD) at 3 h, and it decreased to 38.9 +/- 20.1% at 24 h in 31 patients with T3-predominant Graves' disease during ***treatment*** . It was 20.0 +/- 11.4% at 3 h and increased to 31.9 +/- 16.0% at 24 h in 17

other patients with hyperthyroid Graves' disease who had normal serum T3 and T4 levels and a normal serum T3 to T4 ratio during ***treatment*** (control Graves' disease). The activity of serum TSH receptor antibodies was significantly higher in the patients with T3-predominant Graves' disease than in control Graves' disease patients (60.5 +/- 19.2% vs. 20.4 +/- 18.2%; P less than 0.001). From in vitro studies of thyroid tissue obtained at surgery, both thyroglobulin content and iodine content in thyroglobulin were significantly lower in patients with T3-predominant Graves' disease than in the control Graves' disease patients. Thyroid peroxidase (***TPO***) activity determined by a guaiacol assay was 0.411 +/- 0.212 g.u./mg protein in the T3-predominant Graves' disease patients, significantly higher than that in the control Graves' disease patients (0.129 +/- 0.112 g.u./mg protein; P less than 0.01). Serum ***TPO*** autoantibody levels determined by immunoprecipitation also were greater in T3-predominant Graves' disease patients than in control Graves' disease patients (52.6 +/- 27.7% vs. 32.4 +/- 11.4%; P less than 0.05). Binding of this antibody to ***TPO*** slightly inhibited the enzyme activity of ***TPO*** , but this effect of the antibody was similar in the two groups of patients. The data suggest enhanced iodine metabolism in the thyroid gland of patients with T3-predominant Graves' disease, which may relate to the discordant T3 overproduction in patients with this type of Graves' disease.

L2 ANSWER 221 OF 299 MEDLINE
AN 88033685 MEDLINE
TI Effect of decontamination procedures on recovery of Nocardia spp.
AU Murray P R; Heeren R L; Niles A C
CS Clinical Microbiology Laboratory, Barnes Hospital, Saint Louis, Missouri 63110..
SO JOURNAL OF CLINICAL MICROBIOLOGY, (1987 Oct) 25 (10) 2010-1.
Journal code: HSH. ISSN: 0095-1137.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8802
AB Exposure to 0.5% N-acetyl-L-cysteine (NAC), 2% NaOH-NAC, or benzalkonium chloride in trisodium phosphate (Zephiran- ***TSP***) was toxic for Nocardia isolates. The number of viable Nocardia cells in a standardized suspension was reduced by 10(2) to 10(6) after a 30-min exposure to 2% NaOH-NAC and by 10(4) or more after a 30-min ***treatment*** with Zephiran- ***TSP*** .

L2 ANSWER 222 OF 299 MEDLINE
AN 88033232 MEDLINE
TI Interactions of thrombospondin with endothelial cells: receptor-mediated binding and degradation.
AU Murphy-Ullrich J E; Mosher D F
CS Department of Medicine, University of Wisconsin, Madison 53706..
NC HD07118 (NICHD)
HL29586 (NHLBI)
SO JOURNAL OF CELL BIOLOGY, (1987 Oct) 105 (4) 1603-11.
Journal code: HMV. ISSN: 0021-9525.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Cancer Journals; Priority Journals
EM 8802
AB We studied binding and degradation of labeled platelet thrombospondin (***TSP***) by normal and variant bovine aorta endothelial (BAE) cells. [125I]-labeled ***TSP*** bound to cells at 37 degrees C in a specific, saturable, and time-dependent fashion. Incubation of cell monolayers with fluoresceinated ***TSP*** resulted in punctate cellular staining, but no staining of the extracellular matrix. Heparin, fucoidan, chondroitin sulfate, platelet factor 4, beta-thromboglobulin, unlabeled ***TSP*** , and serum derived from whole blood all competed for binding of [125I] ***TSP*** . [125I] ***TSP*** was degraded to TCA-soluble radioactivity, which appeared in the medium after a 60-90-min lag. Degradation was inhibited to the same extent as binding by increasing concentrations of heparin, fucoidan, platelet factor 4, or whole blood serum. Normal BAE cells bound and degraded less [125I] ***TSP*** than variant BAE cells. The dissociation constants (Kds) for binding and the constants for degradation (Kms) for degradation by the two cell strains, however, were similar (30-50 nM). The inhibitory effects of heparin and platelet factor 4 were lost when the two inhibitors were present in a 1:1 (wt/wt) ratio. ***Treatment*** of suspended cells with trypsin or heparitinase caused less binding of ***TSP*** . These results indicate that there is a specific receptor for ***TSP*** on endothelial cells which mediates binding and degradation. This receptor may be a heparan sulfate proteoglycan.

L2 ANSWER 223 OF 299 MEDLINE
AN 88030381 MEDLINE
TI Structure-activity analysis of microsomal antigen/thyroid peroxidase.
AU Nakajima Y; Howells R D; Pegg C; Jones E D; Smith B R
CS Endocrine Immunology Unit, University of Wales College of Medicine, Cardiff, U.K..
SO MOLECULAR AND CELLULAR ENDOCRINOLOGY, (1987 Sep) 53 (1-2) 15-23.
Journal code: E69. ISSN: 0303-7207.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8802
AB The interaction between thyroid microsomal autoantibodies and thyroid microsomal antigen/thyroid peroxidase (***TPO***) has been studied using both intact antigen preparations and their water-soluble trypsin fragments. In an analysis of sera from 30 patients with Graves' or Hashimoto's diseases, microsomal antibodies showed similar reactivity towards trypsin fragments (with ***TPO*** activity) and intact detergent (sodium deoxycholate, DOC)-solubilized human microsomal antigen preparations ($r = 0.96$). This raised the possibility that both the peroxidase-active site and the major autoantigenic site(s) of microsomal antigen were present on the same trypsin fragments. Studies with porcine ***TPO*** showed that only a few sera contained microsomal antibodies which cross-reacted strongly with the porcine preparations. Further analysis was carried out by immunoprecipitation of 125I-labelled microsomal antigen followed by SDS-PAGE and autoradiography. These studies suggest that intact human microsomal antigen (a single-chain protein with Mr = 110,000) contains an intrachain loop of amino acids formed by a disulphide bridge. Trypsin ***treatment*** cleaves the antigen close to its transmembrane section and releases a water-soluble fragment (Mr = 100,000), containing the intact disulphide-linked loop of amino acids. Further trypsin action causes cleavage of the peptide bonds within the loop in some preparations. Consequently, three major water-soluble trypsin fragments (Mr = 100,000, 73,000 and 68,000) are formed all of which contain an intact disulphide bridge and have microsomal antibody binding activities. The integrity of the disulphide bridge in intact antigen/ ***TPO*** preparations and their trypsin fragments is essential for autoantibody binding activity.

L2 ANSWER 224 OF 299 MEDLINE
AN 88016553 MEDLINE
TI Effects of intrathecal capsaicin on autonomic and behavioral heat loss responses in the rat.
AU Dib B
CS C.N.R.S. Faculte de Medecine Lyon-Sud Universite Claude Bernard, Oullins, France..
SO PHARMACOLOGY, BIOCHEMISTRY AND BEHAVIOR, (1987 Sep) 28 (1) 65-70.
Journal code: P3Q. ISSN: 0091-3057.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8801
AB Capsaicin and Tween 80 were injected into the lumbar subarachnoid space of rats via a chronic cannula, and the thermoregulatory effects compared. The rats were placed in a climatic chamber at an ambient temperature (Ta) of 20 and 30 degrees C. In the first series of experiments the rats had no access to the fan lever. Intrathecal (IT) capsaicin injection produced a fall in rectal temperature, with a rise in cutaneous temperatures due to vasodilation. On the contrary, IT or the intraperitoneal (IP) Tween 80 injection route had no effect on body temperature. In addition capsaicin-***administered*** IP induced a fall in spinal cord temperature (***Tsp***). In the second series of experiments the rats had access to a lever activating a fan that drew cool outside air into the climatic chamber. After IT capsaicin injection, the rats increased bar-pressing behavior for fresh air. This was significant at both Ta 20 and 30 degrees C. The results tend to support the hypothesis of capsaicin action somewhere on the thermal afferent pathways. Furthermore, it is possible that the action of capsaicin on thermoregulatory behavior is mediated by the release of substance

P from primary afferent terminals.

L2 ANSWER 225 OF 299 MEDLINE
AN 88003131 MEDLINE
TI Metastatic dissemination of 3LL variants after ***treatment*** with monoclonal antibody to a tumor-associated antigen.
AU Sacchi A; Kennel S Jr; Natali P G; Tibursi G; Ghetti C A
CS Istituto Regina Elena per lo studio e la cura dei tumori, Laboratorio Biofisica, Roma, Italy..
SO CLINICAL AND EXPERIMENTAL METASTASIS, (1987 Sep) 5 (3) 245-57.
Journal code: DFC. ISSN: 0262-0898.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8801
AB Two tumor lines derived from 3LL (Lewis lung carcinoma) endowed with different metastatic potential and stable for their metastatic phenotype during serial in vivo passages, have been analysed for growth and dissemination following ***treatment*** with a monoclonal antibody. We have used a recently developed MoAb 135-13C to a tumor-associated antigen of murine lung carcinoma having an apparent molecular weight of 180,000 (***TSP*** -180). The metastatic dissemination of the 3LL variants before and after ***treatment*** with the MoAb has been correlated with the expression on the cell surface of the MHC antigens (Db, Kb) and of the ***TSP*** -180 protein. The results of this study indicate that cell with high ***TSP*** -180 protein expression and MHC antigen expression have the greatest metastatic potential. ***Administration*** of MoAb 135-13C to tumor-bearing mice or i.v. injection of cells preincubated with the MoAb 135-13C increase the dissemination capacity of the variant endowed with lower metastatic potential while inducing a reverse effect on the high metastatic one. Studies on the MHC expression demonstrate that MoAb 135-13C ***treatment*** induces changes in the Db and Kb expression at level of secondary neoplasms. The results are discussed in view of the importance of the use of the metastatic variants to study therapeutic effect of specific targeting agent.

L2 ANSWER 226 OF 299 MEDLINE
AN 88001564 MEDLINE
TI Thermal stimulation of the hypothalamus does not evoke the acute-phase reaction.
AU Hunter W S; Blatteis C M; Llanos-Q J; Mashburn T A Jr; Ahokas R A
CS Department of Physiology and Biophysics, University of Tennessee, Memphis 38163..
NC FO5-TWO-3099-02S1
SO BRAIN RESEARCH BULLETIN, (1987 Jul) 19 (1) 69-74.
Journal code: B5M. ISSN: 0361-9230.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8801
AB Interleukin-1 (IL1) injected into the preoptic-anterior hypothalamus (POAH) induces, besides fever, the hepatic synthesis of acute-phase glycoproteins. Since the febrigenic action of IL1 may involve thermosensitive neurons in the POAH, this study examined whether such neurons also might mediate the acute-phase response (APR). The POAH of six adult NZW rabbits was cooled (***Tpo*** = 34.4 +/- 0.4 degrees C [mean +/- SD]) or heated (40.6 +/- 0.2 degrees C) continuously for 2.5 hr (so as to mimic the mean febrile course following a bolus microinjection of IL1 into the POAH). The ambient temperature (Ta) was 23.5 +/- 1.0 degrees C. Expectedly, core temperature fell and skin temperature rose on POAH heating, and the opposite occurred on POAH cooling. However, no statistically significant changes in the plasma levels of Fe, Zn, Cu, and N-acetylneuraminic acid, as indices of the APR, were induced by these ***treatments*** . These results indicate, therefore, that the central actions of IL1 in inducing fever and the APR are separate, and that the APR is not mediated through stimulation of thermosensitive units in the POAH.

L2 ANSWER 227 OF 299 MEDLINE
AN 87304639 MEDLINE
TI The role of erythropoietin, megakaryocyte colony-stimulating factor, and T-cell-derived factors on human megakaryocyte colony formation: evidence for T-cell-mediated and T-cell-independent stem cell proliferation.
AU Geissler D; Konwalinka G; Peschel C; Braunsteiner H
SO EXPERIMENTAL HEMATOLOGY, (1987 Sep) 15 (8) 845-53.
Journal code: EPR. ISSN: 0301-472X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8712
AB Recent studies suggest that megakaryocytopoiesis is governed by a dual-level regulatory process, with megakaryocyte colony-stimulating factor (Meg-CSF) primarily influencing proliferation of the committed precursors and ***thrombopoietin*** required for megakaryocyte ploidy amplification and for maturation. The authors have examined different sources of Meg-CSF in a microagar culture system with a view to their capacity to enhance megakaryocyte colony formation directly or via an indirect T-lymphocyte- or monocyte-mediated effect. The comparative influences of phytohemagglutinin-stimulated leukocyte-conditioned medium (PHA-LCM), erythropoietin (Epo), sera of patients with severe aplastic anemia, and direct PHA addition to the culture were evaluated for their capacity to enhance megakaryocytic colony formation as well as for the maturation rate of megakaryocytes (Mk) grown in our microagar culture system. Each ***treatment*** by itself enhanced colony formation from unseparated low-density cells. Removal of T-lymphocytes and monocytes from the bone marrow sample caused a cessation of the enhancing effect of direct PHA addition to cultures stimulated with Epo, but did not influence the enhancing activities of severe aplastic anemia serum (SAA), PHA-LCM, and Epo. The results show that SAA serum, Epo, and PHA-LCM induced Mk colony formation directly and therefore may act via a common mechanism. Differences, however, were observed concerning their colony-stimulating potency and their influence on the Mk maturation rate.

L2 ANSWER 228 OF 299 MEDLINE
AN 87295302 MEDLINE
TI Influence of nonselective beta-adrenergic impacts on the effects of thrombocytopoietin in mice.
AU Negrev N; Ganchev T
SO ACTA PHYSIOLOGICA ET PHARMACOLOGICA BULGARICA, (1987) 13 (1) 35-40.
Journal code: 1SL. ISSN: 0323-9950.
CY Bulgaria
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8711
AB The effects of plasma thrombocytopoietin are investigated in test mice against the background of nonselective beta adrenergic impacts. The changes in the thrombocytopoiesis are accounted for by the thrombocytes count and by the percentage of 75selenomethionine incorporated in the newly-formed thrombocytes. Plasma thrombocytopoietin is found to stimulate markedly thrombocytopoiesis on the background of beta-adrenergic stimulation with isoprenaline. Pretreatment with propranolol totally prevents this stimulation. Independent ***treatment*** with propranolol as a background of thrombocytopoietin considerably inhibits thrombocytopoiesis. The effects of thrombocytopoietin are found to depend on the state of the beta-adrenoreceptors: their stimulation has a synergic effect on thrombocytopoietin, while their blocking impedes its realization. The data established are indirect proof about the existence of beta-adrenoreceptors in the megakaryocyte series and probably in its precursors as well.

L2 ANSWER 229 OF 299 MEDLINE
AN 87279553 MEDLINE
TI Effects of zeranol-implantation periods on palatability of longissimus steaks from young bulls and steers.
AU Unruh J A; Pelton C D; Gray D G; Dikeman M E; Allen D M; Corah L R
SO JOURNAL OF ANIMAL SCIENCE, (1987 Jul) 65 (1) 165-72.
Journal code: HC7. ISSN: 0021-8812.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8711
AB Fifty-five fall-born, Simmental-crossbred, male calves were allotted at birth to one of five ***treatments*** : bulls castrated at 5 mo and implanted from birth to slaughter (ST); bulls implanted from birth to slaughter (BI-BS); bulls implanted from birth to weaning (BI-BW); bulls implanted from weaning to slaughter (BI-WS) and

non-implanted control bulls (CB). Implanted calves received 36 mg of zeranol at approximately 100-d intervals. Calves were fed a high-concentrate diet from 8.1 mo of age to an average slaughter age of 17 mo. Longissimus steaks (LS) were evaluated for palatability traits by both a trained sensory panel (***TSP***) and a take-home consumer panel (CP). Conclusions from both panels were similar. The ***TSP*** found LS from ST to be juicier (P less than .05) than LS from all bull groups, and to be more tender (P less than .05) than LS from BI-BW and BI-WS. The CP found LS from ST to be juicier, more tender and more acceptable (P less than .05) than LS from BI-BW, BI-WS and CB. Steaks from BI-BS were more tender (P less than .05) than LS from BI-WS and CB. Steaks from BI-BS and BI-BW had lower (P less than .05) shear values than LS from CB, but LS from ST had lower (P less than .05) shear values than LS from all bull groups.(ABSTRACT TRUNCATED AT 250 WORDS)

L2 ANSWER 230 OF 299 MEDLINE
AN 87274562 MEDLINE
TI Expansion-assisted ***treatment*** of male pattern baldness.
AU Anderson R D
SO CLINICS IN PLASTIC SURGERY, (1987 Jul) 14 (3) 477-90.
Journal code: DHX. ISSN: 0094-1298.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8711
AB Scalp expansion has been combined with scalp reduction and flap procedures for the ***treatment*** of male pattern baldness. Expansion offers the advantages of a safe and reliable procedure, as well as more coverage in a shorter period of time. The techniques described involve bilateral temporal parietal occipital (***TPO***) expanders followed by either a frontal ***TPO*** flap and contralateral scalp reduction or bilateral ***TPO*** flaps. Both procedures leave areas of baldness in patients with more extensive losses (Juri classes II and II). Further expansion may be used for further coverage of residual bald areas.

L2 ANSWER 231 OF 299 MEDLINE
AN 87247046 MEDLINE
TI High doses of recombinant erythropoietin stimulate platelet production in mice.
AU McDonald T P; Cottrell M B; Clift R E; Cullen W C; Lin F K
NC HL 14637
SO EXPERIMENTAL HEMATOLOGY, (1987 Jul) 15 (6) 719-21.
Journal code: EPR. ISSN: 0301-472X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8710
AB Previously, recombinant erythropoietin (rEpo) was shown to increase the number and size of megakaryocytic colonies in vitro, and in vivo it elevates the number of megakaryocytes in mouse spleens. To test the hypothesis that rEpo would stimulate platelet production in mice, both normal mice and mice in rebound-thrombocytosis were injected with rEpo and the %35S incorporation into platelets was measured. A thrombocytopoiesis-stimulating factor (TSF or ***thrombopoletin***) was used as a positive control. rEpo increased isotopic incorporation into platelets of both normal mice and mice in rebound-thrombocytosis, as did TSF, but required large doses (15 U rEpo/mouse). In other mice, hematocrits, platelet counts, platelet sizes, and 24-hr %35S incorporation into platelets were measured 2 days after injection of two equally divided doses of either rEpo or TSF. Significant increases in both platelet sizes and %35S incorporation into platelets were found after injections of 15 U rEpo/mouse or 2.3 U TSF/mouse. These data indicate that rEpo, at high doses, will stimulate platelet production in mice, and may suggest molecular similarities between rEpo and TSF and their ability to compete for common receptor sites on megakaryocytes and their progenitor cells.

L2 ANSWER 232 OF 299 MEDLINE
AN 87052327 MEDLINE
TI Autoantibodies to thyroid peroxidase in patients with chronic thyroiditis: effect of antibody binding on enzyme activities.
AU Kohno Y; Hiyama Y; Shimojo N; Niimi H; Nakajima H; Hosoya T
SO CLINICAL AND EXPERIMENTAL IMMUNOLOGY, (1986 Sep) 65 (3) 534-41.
Journal code: DD7. ISSN: 0009-9104.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8703
AB Using thyroid peroxidase (***TPO***), which was purified from the thyroid of patients with Graves' disease, we attempted to determine whether sera from patients with chronic thyroiditis contained antibodies to the enzyme. When the binding was tested by ELISA, sera from patients with chronic thyroiditis revealed high binding activities to ***TPO*** . When ***TPO*** was incubated with IgG from sera followed by ***treatment*** with protein A-Sepharose and centrifugation, the remaining ***TPO*** activities in the supernatant fraction were lower in most of the patients, as compared to normal controls. Moreover, IgG purified by DEAE-cellulose chromatography from sera in patients interfered with the ***TPO*** activities. Titres of anti- ***TPO*** antibodies correlated well with those of anti-microsome antibodies. These results indicate the presence of autoantibodies to ***TPO*** in sera of most patients with chronic thyroiditis and that ***TPO*** may be one component of microsome antigen complexes recognized by the autoantibodies. Studies on the inhibition of ***TPO*** by IgG isolated from sera of patients using guaiacol and iodide assays revealed that at least three epitopes of ***TPO*** molecule were recognized by autoantibodies and that the antigenic determinants on ***TPO*** molecule recognized by autoantibodies could be heterogeneous in patients.

L2 ANSWER 233 OF 299 MEDLINE
AN 87030612 MEDLINE
TI Thrombospondin-induced attachment and spreading of human squamous carcinoma cells.
AU Varani J; Dixit V M; Fligiel S E; McKeever P E; Carey T E
NC CA36132
CA28564
2 S07 RR05384-25
+
SO EXPERIMENTAL CELL RESEARCH, (1986 Dec) 167 (2) 376-90.
Journal code: EPB. ISSN: 0014-4827.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8702
AB Thrombospondin (***TSP***) induced the attachment and spreading of human squamous carcinoma cells on plastic culture dishes and dishes coated with type I or type IV collagen. Increased adhesion was detected as early as 15 min after ***treatment*** . Dose-response studies indicated that 1-5 micrograms of ***TSP*** per 35 mm (diameter) culture dish was sufficient to induce a response and that a half-maximal response occurred at 10 micrograms of ***TSP*** /dish. The squamous carcinoma cells synthesized ***TSP*** as indicated by biosynthetic labeling experiments. ***TSP*** was secreted (or shed) into the culture medium by these cells and also became bound to the cell surface. ***TSP*** also promoted adhesion of human keratinocytes, fibroblasts and fibrosarcoma cells but did not induce attachment or spreading of human melanoma or glioma cells, although these cells did respond to laminin.

L2 ANSWER 234 OF 299 MEDLINE
AN 86300958 MEDLINE
TI Comparison of stereologic techniques for the quantification of megakaryocyte size and number.
AU Cullen W C; McDonald T P
NC HL 14637
SO EXPERIMENTAL HEMATOLOGY, (1986 Sep) 14 (8) 782-8.
Journal code: EPR. ISSN: 0301-472X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8612
AB This work describes the relationship between megakaryocyte size and number in bone marrow, based on stereologic theory, and compares methods of megakaryocyte quantitation from bone marrow sections. Mice were assigned to four ***treatment*** groups and received a single injection of either saline (S), thrombocytopoiesis-stimulating factor (TSF), normal rabbit serum (NRS), or rabbit anti-mouse platelet serum (RAMPS). Nine mice from each group were killed daily for three days, and one femur was removed from each mouse and sections prepared for light microscopy. Megakaryocytes

were quantified using two general methods. In method 1, diameters of megakaryocyte section profiles were estimated from measurements of cell perimeter, major and minor axes, and profile area. Profile-size distributions, corrected for errors due to section thickness and optically lost profiles, were used to calculate mean megakaryocyte diameter (D). Megakaryocyte diameter and an estimate of the number of profiles per unit section area (NA) were used to calculate the number of megakaryocytes per unit volume (NV) of bone marrow. In method 2, estimates of the cell volume fraction and NA were used to calculate megakaryocyte NV and D. All calculations were made in accordance with the principles of stereology, a branch of morphometry based on geometric probability. Both methods provided satisfactory precision in estimating megakaryocyte D and NV. In general, cell D and NV were unchanged in S- and NRS- ***treated*** mice and were significantly greater after TSF and RAMPS ***treatment*** . This study confirms the biological effects of RAMPS and TSF on megakaryocytes and presents practical, precise methods by which megakaryocytes can be quantified from bone marrow sections.

L2 ANSWER 235 OF 299 MEDLINE
AN 86278037 MEDLINE
TI Tissue plasminogen activator and urokinase enhance the binding of plasminogen to thrombospondin.
AU Silverstein R L; Harpel P C; Nachman R L
NC HL18828
HL30649
K11HLAM1442
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1986 Jul 25) 261 (21) 9959-65.
Journal code: HIV. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8611
AB Thrombospondin (***TSP***) is a multifunctional platelet alpha-granule and extracellular matrix glycoprotein that binds specifically to plasminogen (Plg) via that protein's lysine-binding site and modulates activation by tissue activator (TPA). In this study we report that the plasminogen activators, TPA and urokinase, greatly influence the binding of Plg to ***TSP*** . Using an enzyme-linked immunosorbent assay and a ***TSP*** -Sepharose affinity bead-binding assay we have found that Plg- ***TSP*** complex formation was markedly enhanced (up to 5-fold) when catalytic concentrations of Plg activators were included in the reaction mixtures. The enhancement was dependent upon the generation of small amounts of active plasmin and was duplicated by pretreatment of the immobilized ***TSP*** with plasmin prior to addition of the Plg. The enhancement effect was associated with selective proteolysis of the immobilized ***TSP*** . Purified Lys-Plg (the plasmin modified form of native Glu-Plg) bound to ***TSP*** to a greater extent than Glu-Plg, and binding of both forms was augmented by Plg activators. The apparent KD values of complex formation were unchanged in the presence of Plg activators suggesting that the enhancement effect was due to the generation of additional binding sites. The increased amount of bound Plg was demonstrated to result in a similar increase in the amount of plasmin generated from the complexes by TPA. Plg activators did not influence binding of Plg to histidine-rich glycoprotein or of histidine-rich glycoprotein to ***TSP*** , demonstrating specificity. In addition when ***TSP*** was ***treated*** with other proteases (human thrombin or human leukocyte elastase) no augmentation of Plg binding was seen. Thus, the initial production of small amounts of plasmin from Plg immobilized on ***TSP*** in fibrin-free microenvironments could generate a positive feedback loop by enzymatically modifying both ***TSP*** and Plg, resulting in an increase in ***TSP*** -Plg complex formation leading to the localized production of substantially more plasmin.

L2 ANSWER 236 OF 299 MEDLINE
AN 86208948 MEDLINE
TI Functional involvement of thrombospondin in platelet aggregation induced by low versus high concentrations of thrombin.
AU Kao K J; Shaut D M; Klein P A
SO THROMBOSIS AND HAEMOSTASIS, (1986 Feb 28) 55 (1) 136-42.
Journal code: VQ7. ISSN: 0340-6245.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8608
AB Thrombospondin (***TSP***) is a major platelet secretory glycoprotein. Earlier studies of various investigators demonstrated that ***TSP*** is the endogenous platelet lectin and is responsible for the hemagglutinating activity expressed on formaldehyde-fixed thrombin- ***treated*** platelets. The direct effect of highly purified ***TSP*** on thrombin-induced platelet aggregation was studied. It was observed that aggregation of gel-filtered platelets induced by low concentrations of thrombin (less than or equal to 0.05 U/ml) was progressively inhibited by increasing concentrations of exogenous ***TSP*** (greater than or equal to 60 micrograms/ml). However, inhibition of platelet aggregation by ***TSP*** was not observed when higher than 0.1 U/ml thrombin was used to activate platelets. To exclude the possibility that ***TSP*** inhibits platelet aggregation by affecting thrombin activation of platelets, three different approaches were utilized. First, by using a chromogenic substrate assay it was shown that ***TSP*** does not inhibit the proteolytic activity of thrombin. Second, thromboxane B2 synthesis by thrombin-stimulated platelets was not affected by exogenous ***TSP*** . Finally, electron microscopy of thrombin-induced platelet aggregates showed that platelets were activated by thrombin regardless of the presence or absence of exogenous ***TSP*** . The results indicate that high concentrations of exogenous ***TSP*** (greater than or equal to 60 micrograms/ml) directly interfere with interplatelet recognition among thrombin-activated platelets. This inhibitory effect of ***TSP*** can be neutralized by anti- ***TSP*** Fab. In addition, anti- ***TSP*** Fab directly inhibits platelet aggregation induced by a low (0.02 U/ml) but not by a high (0.1 U/ml) concentration of thrombin.(ABSTRACT TRUNCATED AT 250 WORDS)

L2 ANSWER 237 OF 299 MEDLINE
AN 86128827 MEDLINE
TI Trimethoprim-polymyxin B ophthalmic solution in ***treatment*** of surface ocular bacterial infections.
AU Nozik R A; Smolin G; Knowlton G; Austin R
SO ANNALS OF OPHTHALMOLOGY, (1985 Dec) 17 (12) 746-8.
Journal code: 5PA. ISSN: 0003-4886.
CY United States
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Priority Journals
EM 8605
AB A safety and efficacy study comparing the clinical and bacteriologic effectiveness of trimethoprim-sulfacetamide-polymyxin B-neomycin-gramicidin in a group of patients with surface ocular bacterial infections was conducted. The results demonstrated ***TSP*** to be as effective as the other solution (both clinically and bacteriologically), with fewer adverse experiences. A second study was conducted comparing ***TSP*** with trimethoprim-polymyxin B (TP) and found TP to be superior to ***TSP*** in effecting bacteriologic cures. Clinical response was similar in both groups, and the low incidence of mild adverse experiences was approximately the same. It appears that the combination of trimethoprim with polymyxin B is safe and highly efficacious, both clinically and microbiologically, for the ***treatment*** of surface ocular bacterial infections.

L2 ANSWER 238 OF 299 MEDLINE
AN 86111879 MEDLINE
TI Monoclonal antibodies that recognize calcium-dependent structures of human thrombospondin. Characterization and mapping of their epitopes.
AU Dixit V M; Galvin N J; O'Rourke K M; Frazier W A
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1986 Feb 5) 261 (4) 1962-8.
Journal code: HIV. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8605
AB Monoclonal antibodies (mAbs) raised against reduced and alkylated thrombospondin (***TSP***) were screened for the ability to react with Ca2+-replete ***TSP*** versus EDTA- ***treated*** ***TSP*** . Two mAbs designated A6.1 and D4.6 were found to react much more strongly with ***TSP*** after EDTA ***treatment*** . The dissociation constants for these mAbs were measured in 5 mM EDTA and found to be 6 X 10(-10) M for A6.1 and 7 X 10(-9) M for

D4.6. Binding to A6.1 was undetectable in the presence of 1 mM Ca2+ while binding of D4.6 occurred with about 100-fold lower affinity. The Ca2+ concentration dependence of A6.1 binding was broad with a midpoint near 50 microM free Ca2+ while that of D4.6 showed a sharp transition below 0.1 microM. Upon dialysis of EDTA- ***treated*** ***TSP*** into Ca2+ containing buffer, the binding of the mAbs was prevented or decreased, indicating reversibility of the conformational transition induced by the initial removal of Ca2+ . Mg2+ can compete with the Ca2+ binding sites involved in mAb binding, but ***TSP*** dialyzed from Ca2+ into Mg2+ binds the two mAbs as well as EDTA- ***treated*** ***TSP*** , indicating that Mg2+ cannot maintain the Ca2+-replete structure of ***TSP*** . The proteolytic fragments of ***TSP*** with which the two mAbs react were determined by probing Western blots of digests of ***TSP*** with the mAbs. A6.1 reacts with the 70-kDa fragment generated by chymotrypsin in EDTA which contains the interchain disulfide bonds of ***TSP*** and the binding site(s) for type V collagen (Mumby, S. M., Raugi, G. J., and Bornstein, P. (1984) J. Cell Biol. 98, 646-652). D4.6 reacts with fragments of 140 and 120 kDa found in digests of Ca2+-replete ***TSP*** which are absent from digests in EDTA. Electron microscopy of rotary shadowed, carbon-coated replicas of ***TSP*** mAb complexes confirms the Ca2+ sensitivity of mAb binding and has been used to localize the epitopes for both mAbs on the three-dimensional structure of ***TSP*** .

L2 ANSWER 239 OF 299 MEDLINE
AN 86002800 MEDLINE
TI Improved method of thyroid peroxidase extraction from the human thyroid gland.
AU Sugawara M; Thayer C L; Kita T; Kuma K
SO CLINICA CHIMICA ACTA, (1985 Sep 16) 151 (1) 17-22.
Journal code: DCC. ISSN: 0009-8981.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8601

AB This study describes a new method of solubilizing thyroid peroxidase (***TPO***) and partial purification of ***TPO*** from a small surgical specimen of human thyroid tissue. Graves' thyroid tissue was homogenized and centrifuged to obtain the 100 000 X g pellet. To solubilize ***TPO*** from the 100 000 X g pellet protein, the following four detergents were used: Triton X-100, digitonin, sodium deoxycholate, and 3-[(3-choramidpropyl)-dimethylammonio] 1-propanesulfate (CHAPS). For some samples, two detergents were combined and trypsin was also used. The best solubilization of ***TPO*** activity was obtained from the combination of digitonin-CHAPS-trypsin ***treatment*** or deoxycholate-CHAPS-trypsin ***treatment*** . The solubilized crude ***TPO*** was then chromatographed on a Sephacryl S 300 column. The results of chromatography indicated that detergent ***treatment*** alone did not separate ***TPO*** from other membrane proteins and the addition of trypsin was required for separation of ***TPO*** . Sephacryl chromatography of detergent-trypsin solubilized ***TPO*** was suitable as an initial step for purification of ***TPO*** from a small human thyroid tissue.

L2 ANSWER 240 OF 299 MEDLINE
AN 85298382 MEDLINE
TI Effect of ***thrombopoietin*** on in vitro production of megakaryocytes from fetal mouse liver cells.
AU Kalmaz G D; McDonald T P
NC HL 14637
HL 06072
SO PROCEEDINGS OF THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE,
(1985 Oct) 180 (1) 50-6.
Journal code: PXZ. ISSN: 0037-9727.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8512
AB Plasma clots containing fetal mouse liver cells (FMLC) were used to study the effects of a thrombocytopoiesis-stimulating factor (TSF) from kidney cell culture medium on the proliferation and maturation of megakaryocytes. Cells in the megakaryocytic series were identified by the presence of acetylcholinesterase (AChE) and by their morphological and ultrastructural characteristics. For these experiments, 1 X 10(3) to 1 X 10(5) FMLC were cultured for 1-7 days with 0-5 micrograms of TSF; control cultures were ***treated*** with production medium (PMC) in which kidney cells had not been grown. The number of AChE+ cells that were observed depended upon the number of cells plated, i.e., after 6 days of culture with 5 micrograms of TSF, an average of 187 AChE+ cells was found after plating 1 X 10(4) cells and 1020 AChE+ cells were observed after plating 1 X 10(5) cells. In dose-response experiments, the number of AChE+ cells rose with increasing doses of TSF. Significantly elevated numbers of AChE+ cells were observed after the addition of 1-5 micrograms of TSF. The optimum time of culture, based upon the number of AChE+ cells found, was 3-5 days. Ultrastructural analysis of megakaryocytes in plasma clots showed evidence of platelet shedding on Day 5. After the culture of FMLC with TSF, a larger number of AChE+ cells was formed from a given number of cells plated than in previous studies that used adult bone marrow cells. Therefore, because of its greater sensitivity, FMLC may be useful for the assay of low levels of TSF, and may be a valuable tool for studying the effects of megakaryocytic regulatory factors on megakaryocytopoiesis.

L2 ANSWER 241 OF 299 MEDLINE
AN 85285109 MEDLINE
TI Isolation of mouse megakaryocytes. I. Separation of two fractions enriched in different maturational stages.
AU Raha S; Wesemann W; McDonald T P
NC HL 14637
SO EUROPEAN JOURNAL OF CELL BIOLOGY, (1985 May) 37 111-6.
Journal code: EM7. ISSN: 0171-9335.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8512
AB Megakaryocytes (MK) were isolated from mouse bone marrow by centrifugation on discontinuous gradients of isotonic albumin or Percoll and characterized by acetylcholinesterase (AChE) staining. The apparent density distributions of MK varied greatly depending upon the nature of the gradient medium and the composition of the cell suspension buffer while the density range of the other bone marrow cells remained largely unchanged. The present findings also indicate that the unusual morphological and functional characteristics of MK may underlie the observed shift in their density profile. Thrombocytopoietic stimulatory factor (TSF) was ***administered*** to mice 18 h before killing to elevate the normally low numbers of earlier MK in the bone marrow and to improve the yield of immature MK during the subsequent isolation procedure. Cells belonging to earlier stages in maturation were separated from the more mature ones on discontinuous Percoll density gradients, providing a basis for further investigation of MK development.

L2 ANSWER 242 OF 299 MEDLINE
AN 85208160 MEDLINE
TI Coupling of iodotyrosine catalyzed by human thyroid peroxidase in vitro.
AU Sugawara M
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1985 Jun) 60 (6)
1069-75.
Journal code: HRB. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 8509
AB The coupling of iodotyrosine (coupling reaction) is one of the least studied in the formation of thyroid hormone, particularly in human thyroid diseases. This paper describes a method of measuring iodotyrosine coupling catalyzed by human thyroid peroxidase (***TPO***) in vitro. There were two important requirements to demonstrate the coupling reaction: 1) thyroglobulin with a low thyroid hormone content, and 2) partially purified ***TPO*** . Thyroglobulin with low thyroid hormone content was obtained from Grave's and follicular adenoma tissues after propylthiouracil (PTU) ***therapy*** and L-T4 ***therapy*** , respectively. ***TPO*** was prepared from Graves' thyroid by solubilizing the 100,000 X g pellet of thyroid homogenate with sodium deoxycholate and trypsin, followed by Sephacryl S-300 gel filtration. Before the coupling reaction, thyroglobulin was iodinated with chloramine-T and potassium iodide, followed by dialysis. The coupling reaction was

carried out by incubating newly iodinated thyroglobulin with ***TPO*** , diiodotyrosine, a coupling stimulator, and a H2O2-generating system (glucose and glucose oxidase) for 20 min at 37 C. After thyroglobulin was digested with Pronase, the thyroid hormone content of the thyroid digest was measured by RIA. Coupling activity was measured by the amount of newly formed T3 (nanograms of T3 per mg thyroglobulin). The time course of coupling reaction showed a progressive increase in coupling activity up to 30 min, and the reaction was temperature and pH dependent, with a pH optimum of 7.0. Coupling activity in the presence of H2O2 and ***TPO*** was 43 +/- 5.0 ng T3/mg thyroglobulin (mean +/- SD of triplicate samples), and addition of diiodotyrosine to the H2O2- ***TPO*** system caused a nearly 3-fold increase in coupling activity. This method has potential utilization for measurement of peroxidase coupling activity, since there was a linear relationship between the measured coupling activity and the amount of added ***TPO*** when the ***TPO*** concentration was over 3 micrograms/300 microliter. Methimazole (MMI) and PTU had similar potencies in inhibiting the ***TPO*** -catalyzed coupling reaction, whereas MMI was distinctly more potent than PTU as an inhibitor of ***TPO*** -mediated iodination in vitro. The different potencies of MMI in the two reactions suggest that different inhibitory mechanisms may be involved in iodination and coupling. The reducing agent, sodium metabisulfite, was also found to be a more potent inhibitor of the ***TPO*** -mediated coupling reaction than of the ***TPO*** -mediated iodination reaction. The method of iodotyrosine coupling described here may be useful to investigate the coupling step of thyroid hormone formation in human thyroid diseases.

L2 ANSWER 243 OF 299 MEDLINE
AN 84188840 MEDLINE
TI Experimental studies on distribution of cefotiam, a new beta-lactam antibiotic, in the lung and trachea of rabbits. II. Combined effects with serratiopeptidase.
AU Ishihara Y; Kitamura S; Takaku F
SO JAPANESE JOURNAL OF ANTIBIOTICS, (1983 Oct) 36 (10) 2665-70.
Journal code: KHV. ISSN: 0368-2781.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA Japanese
FS Priority Journals
EM 8408
AB Plasma levels and distribution in pulmonary and bronchial tissues of CTM following injection into the jugular vein were investigated in rabbits with experimental pleuritis or pneumonitis as well as in normal rabbits. The experiments also included the assessment of the effect of concomitant ***administration*** of serratiopeptidase (***TSP***). The pneumonitis + ***TSP*** group, pleuritis group and pleuritis + ***TSP*** group showed a tendency to delayed dissipation of CTM from the plasma, as compared with controls. The CTM concentrations in tissues from the apical region of upper lobe (L1), lateral region of middle lobe (L2) and diaphragmatic region of lower lobe (L3) 30 minutes after injection did not differ significantly between the control and the ***TSP*** group, pleuritis group or pleuritis + ***TSP*** group. In the pneumonitis group, the tissue CTM concentrations at all 3 sites (L1, L2, L3) were lower than those in the control group. They were increased by the concomitant ***administration*** of ***TSP*** , with statistical significance of increase in regions L2 and L3. Thirty minutes after the injection of CTM, the pneumonitis group and pneumonitis + ***TSP*** group displayed essentially comparable CTM levels in pleural fluid, whereas the CTM concentrations in the pleural fluid were prone to be increased in the pleuritis + ***TSP*** group as comparing with the pleuritis group. CTM levels in the tissues of trachea (B0), right and left main bronchi (B1) and lobar bronchi (B2) 30 minutes after the injection did not show any significant difference between control and ***TSP*** - ***treated*** normal groups. CTM concentrations tended to be increased, yet not significantly, in all these regions in the rabbits with pleuritis ***administered*** ***TSP*** , compared to those without ***TSP*** .(ABSTRACT TRUNCATED AT 250 WORDS)

L2 ANSWER 244 OF 299 MEDLINE
AN 84167091 MEDLINE
TI Activation of liver tryptophan oxygenase by hydrocortisone, hematin and tryptophan in streptozotocin-diabetic rats.
AU Sadler E M; Weiner M; Buterbaugh G G
SO LIFE SCIENCES, (1984 Apr 2) 34 (14) 1365-70.
Journal code: L62. ISSN: 0024-3205.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8407
AB This study compared changes in liver tryptophan oxygenase (***TPO***) activity in response to hydrocortisone, hematin and tryptophan ***administration*** to non-diabetic and diabetic (streptozotocin) rats. Hydrocortisone caused similar increases in apoenzyme (inactive), holoenzyme (heme-saturated) and total (holoenzyme + apoenzyme) ***TPO*** activities in non-diabetic and diabetic rats. The ability of hematin to increase total ***TPO*** activity was significantly less in diabetic rats. The largest differences between diabetic and non-diabetic rats were found with tryptophan which increased total ***TPO*** and holoenzyme activities 300% and 650% respectively in non-diabetic rats. However, tryptophan increased both apoenzyme (unchanged in non-diabetic rats) and holoenzyme activities by 300% in diabetic rats. These results indicate that in the diabetic state, the ***TPO*** -heme conjugation process is impaired, especially substrate mediated ***TPO*** -heme saturation.

L2 ANSWER 245 OF 299 MEDLINE
AN 84103618 MEDLINE
TI Prognosis for improved verbal communication in aphasic stroke patients.
AU Marshall R C; Phillips D S
SO ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION, (1983 Dec) 64 (12)
597-600.
Journal code: 8BK. ISSN: 0003-9993.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 8404
AB Information for predicting to what degree a patient will recover from aphasia has not been available to the physician. This study examined the role of 10 selected prognostic variables in relation to recovery of verbal communication in a homogeneous sample of ***treated*** aphasic patients. Terminal speech performance (***TSP***) could be discriminated 86% of the time by 6 variables; (1) initial severity of aphasia, (2) number of months after stroke, (3) auditory comprehension ability, (4) age, (5) speech fluency, and (6) general health. The predictive value of these variables was slightly higher (91.2%) for patients with good ***TSP*** than for those with poor ***TSP*** (82.6%).

L2 ANSWER 246 OF 299 MEDLINE
AN 84072156 MEDLINE
TI Effect of streptozotocin-induced diabetes on tryptophan oxygenase activity and brain tryptophan levels in rats.
AU Sadler E; Weiner M; Buterbaugh G G
SO RESEARCH COMMUNICATIONS IN CHEMICAL PATHOLOGY AND PHARMACOLOGY,
(1983 Oct) 42 (1) 37-50.
Journal code: R62. ISSN: 0034-5164.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8403
AB Alterations in brain tryptophan levels and the rate of hepatic tryptophan metabolism by tryptophan oxygenase (***TPO***) were studied in male Sprague-Dawley rats rendered diabetic by intravenous ***administration*** of streptozotocin (STZ), 65 mg/kg. Determinations were made at the early onset of diabetes (1-4 days of glucosuria) and 8-12 days following STZ injection. Rats were considered diabetic if their serum glucose exceeded 250 mg percent. Tryptophan brain levels decreased by 17% after four days of diabetes, decreased by 22% on day 5, and by 27% 8-12 days after STZ. Brain 5-hydroxyindoleacetic acid levels were significantly decreased by 27% on day 5, but returned to control levels by 8-12 days. Serotonin concentration in the brain remained at control values. The initial appearance of a significant increase in total ***TPO*** activity coincided with the onset of a change in brain tryptophan. Total ***TPO*** activity increased by 60% after 4 days of diabetes. The increase was caused by an increase in apoenzyme activity since holoenzyme activity remained unaltered. Holoenzyme activity was increased by 37% after 8-12 days, and accounted for the change in total ***TPO*** activity. Insulin ***treatment***

reversed the STZ-induced alterations. The results are compatible with the hypothesis that diabetes increases hepatic ***TPO*** activity that in turn results in decreased plasma tryptophan levels and decreased availability of tryptophan for brain uptake. However, compensatory changes appear to maintain a stable serotonin concentration in the brain. The early and later changes in ***TPO*** activity during diabetes are apparently caused by different regulatory events.

L2 ANSWER 247 OF 299 MEDLINE
AN 84002543 MEDLINE
TI Rat intraperitoneal sepsis--a clinically relevant model.
AU Short B L; Gardiner W M; Walker R i; Fletcher J R; Rogers J E
SO CIRCULATORY SHOCK, (1983) 10 (4) 351-9.
Journal code: C9Y. ISSN: 0092-6213.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8401
AB The pathologic changes in septic shock, a disease state involving several hemodynamic and metabolic parameters, are not completely understood. Because research on animals can provide information vital to ***treating*** disease in humans, and because of the increasing constraints on clinical trials with humans, a clinically relevant animal sepsis model has been developed using adult male Sprague-Dawley rats. Sepsis was induced in large numbers of rats by IP injections of discrete quantities of live E coli organisms. The following elements were measured at specific times: MAP, CO, CVP, WBC, platelets, hemoglobin, hematocrit, PT, PTT, fibrinogen, clotting factors, glucose, blood gases, Ca++, Mg++, and ***TSP*** . The study shows that the model is easily replicated and relatively inexpensive, and that it can be used for detailed study in rats of several of the pathophysiological states characteristic of sepsis in humans.

L2 ANSWER 248 OF 299 MEDLINE
AN 83241822 MEDLINE
TI Significance of hypocalcemia following hypovolemic shock.
AU Harrigan C; Lucas C E; Ledgerwood A M
SO JOURNAL OF TRAUMA, (1983 Jun) 23 (6) 488-93.
Journal code: KAF. ISSN: 0022-5282.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 8310
AB Changes in calcium levels during and after resuscitation from severe shock were studied in 22 seriously injured patients who received an average of 21 blood transfusions and 26 mEq supplemental calcium. Total serum proteins (***TSP***), serum albumin (SA), total calcium (TC), and ionized calcium (CA++), were studied intraoperatively after the tenth transfusion and postoperatively at 5 hours, 15 hours, day 2, day 4, and during convalescence (day 25). The intraoperative ***TSP*** fell to 3.7 gm%; the TC and Ca++ fell to 7.2 mg% and 1.4 mEq/L. The ***TSP*** and SA remained low throughout day 4 (4.8 and 2.6 gm%); the TC was also low on day 4 (7.5 mg%), whereas the Ca++ rose to normal (2.1 mEq/L) by day 2. The severity of hypocalcemia paralleled the hypoproteinemia, the number of transfusions given during resuscitation, and the duration of shock; paradoxically, hypocalcemia correlated inversely with Ca++ supplementation of blood transfusions during resuscitation, suggesting increased extravascular Ca++ flux with more severe shock. Further studies in comparably injured patients are needed to identify the concomitant responses of the calcium homeostatic factors such as parathormone in order to help identify the optimal role of calcium manipulation during resuscitation from hypovolemic shock.

L2 ANSWER 249 OF 299 MEDLINE
AN 83234314 MEDLINE
TI Correlation between thyroid peroxidase activity and histopathological and ultrastructural changes in various thyroid diseases.
AU Mizukami Y; Matsubara F
SO ENDOCRINOLOGIA JAPONICA, (1981 Aug) 28 (4) 381-9.
Journal code: EG5. ISSN: 0013-7219.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8310
AB A morphological and biochemical study was performed on thyroid tissue with various thyroid diseases. The thyroid peroxidase (***TPO***) activity of normal thyroid tissues ranged from 2.6 to 7.0 mGU/mg DNA. The activity was low in adenomas and extremely low in carcinomas, and there was no significant relationship between the histological subclassification of follicular adenomas (simple, colloid, oxyphil) and ***TPO*** activity. The activity was various in the cases of chronic thyroiditis, ranging from non-detectable to 9.8 mGU/mg DNA, and the ***TPO*** activity showed a close correlation with the degree of lymphoid cell infiltration of the diseases. In the seven cases of Graves' disease, the values were high, though the elevation was not so remarkable in three cases which had already been euthyroid or slightly hypothyroid after long-term ***treatment*** . By means of subcellular fractionation, more than 50% of peroxidase activity was shown to be localized in the microsomal pellets, and this result well coincided with the electron microscopic findings of prominent development of rER.

L2 ANSWER 250 OF 299 MEDLINE
AN 83234286 MEDLINE
TI Mechanism of action of thioureylene antithyroid drugs in the rat: possible inactivation of thyroid peroxidase by propylthiouracil.
AU Shiroozu A; Taurog A; Engler H; Dorris M L
NC AM-03612
SO ENDOCRINOLOGY, (1983 Jul) 113 (1) 362-70.
Journal code: EGZ. ISSN: 0013-7227.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 8310
AB We have previously shown that the thioureylene antithyroid drugs 6-propyl-2-thiouracil (PTU) and 1-methyl-2-mercaptoimidazole (MMI) can inactivate thyroid peroxidase (***TPO***) in a model iodination system containing relatively high concentrations of iodide. The purpose of the present study was to determine whether these drugs may also inactivate ***TPO*** in vivo in rats. Assays for total ***TPO*** activity after injection of PTU or MMI did not prove to be a valid approach. As ***TPO*** inactivation might be expected to result in a relatively prolonged inhibition of enzyme activity, most of our experiments involved measurement of the duration of the inhibitory effect of a single injection of drug. Young rats were injected with low doses of PTU or MMI, and the effect on thyroidal organic iodine formation was determined at intervals after injection, either by 1-h pulse labeling with 131I- in vivo or by incubation of excised thyroid lobes in a medium containing 131I-. Results of both types of experiment demonstrated that the inhibitory effect of a small dose of PTU (1 mumol/100 g BW) was still very marked 17-18 h after injection. Moreover, an inhibitory effect of this small dose of PTU on the metabolism of [35S]MMI could also be demonstrated. ***Administration*** of MMI to rats, on the other hand, did not show the prolonged inhibitory effect observed with PTU. This is most likely attributable to the much lower thyroidal uptake of MMI than of PTU in rats. Intrathyroidal metabolism of [35S]PTU and [35S]MMI was also investigated. In contrast to the rapid disappearance of 35S from plasma, both drugs showed accumulation and retention of 35S in the thyroid. However, we obtained no evidence that thyroidal accumulation of PTU or one of its metabolites could explain the prolonged inhibitory effect of this drug. It seemed more likely that this was attributable to ***TPO*** inactivation. The clinical implications of our findings are discussed with relation to the dosage schedule commonly employed in the ***treatment*** of Graves' disease with antithyroid drugs.

L2 ANSWER 251 OF 299 MEDLINE
AN 83199087 MEDLINE
TI [Therapeutic use of synthetic Gn-RH-Dirigestran in disorders of the reproductive cycle in cows from low-fertility herds].
Terapeuticke pouziti syntetickeho Gn-RH-Dirigestranu pri poruchach reprodukcniho cyklu krav v chovech s nizkou plodnosti.
AU Rob O; Klimes V; Reichel F; Kohout L; Cep K
SO VETERINARNI MEDICINA, (1983 Feb) 28 (2) 65-72.
Journal code: XBP. ISSN: 0375-8427.
CY Czechoslovakia
DT Journal; Article; (JOURNAL ARTICLE)
LA Czech
FS Priority Journals

EM 8308

AB Synthetic Gn-RH-Dirigestran Spofa was used for the ***treatment*** of 121 cows with functional ovarial disorders. Out of this total number, 41 cows showed no postpartal and no post-service symptoms of oestrus, 59 returned to oestrus with irregular cycles, and 21 cows showed an irregular course of oestrus. The ***treatment*** was made in herds with a low conception rate (32-37% conceptions after the first insemination, service period 108 to 142 days). On the whole, 80.1% of the ***treated*** cows got in calf, 53.7% conceived after the first insemination. The average time from ***treatment*** to successful insemination was 39 days. The ***treatment*** was started 148 days from parturition, on an average. The average insemination index of the ***treated*** cows was 1.44. As to cows out of heat, 70.7% got in calf on the whole and 51.2% after the first insemination, the therapeutic service period (***TSP***) being 44 days. Out of the cows returning to oestrus with an irregular cycle, 84.7% got in calf and 52.5% got in calf after the first insemination with the ***TSP*** of 37 days, and the cows with irregular cycle the conception was recorded in 85.7% (61.9% after the first insemination with the average ***TSP*** of 35 days). On the whole, 82% of ***treated*** cows showed clearly visible symptoms of oestrus after the application of Dirigestran. The pregnancy of the whole set (121 ***treated*** cows) was higher by 15 to 21% after the first insemination and by 41 to 49% after all inseminations, as compared with the pregnancy of normally inseminated cows in these herds. The results show that the ***treatment*** of the functional disorders of ovaries is also practicable in cows in herds with a decreased fertility if this ***treatment*** is not impaired by spermiotoxicity or embryotoxicity owing to the effects of inadequate secretions of sexual organs caused by incorrect nutrition or infections.

L2 ANSWER 252 OF 299 MEDLINE

AN 83178463 MEDLINE

TI Glucocorticoid induction of tryptophan oxygenase. Attenuation by intragastrically ***administered*** carbohydrates and metabolites.

AU Altar C A; Bennett B L; Wallace R; Yuwiler A

NC DA 05136-02

SO BIOCHEMICAL PHARMACOLOGY, (1983 Mar 15) 32 (6) 979-84.
Journal code: 9Z4. ISSN: 0006-2952.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 8307

AB In vivo tryptophan 2,3-dioxygenase (***TPO***) activity in male rats was estimated from the rate of production of 14CO2 after intragastric ***administration*** of [14C-2]tryptophan. The synthetic glucocorticoids hydrocortisone-21-sodium succinate or Triamcinolone acetonide were injected to elevate hepatic ***TPO*** activity on an acute (1-6 hr) or chronic (24 hr) basis. Glucose, fructose, or glycerol was intragastrically intubated in doses ranging from 4 to 16 mmoles to assess their abilities to attenuate acute or chronic increases of ***TPO*** activity by these glucocorticoids. Hydrocortisone-21-sodium succinate at doses of 0, 25, and 50 mg/kg produced dose-dependent elevations of ***TPO*** . A 50 mg/kg dose produced a 3-fold elevation of enzyme activity when measured in vitro as product produced by liver homogenates and a 2-fold elevation when assessed from expired radioactive carbon dioxide from radiolabeled tryptophan in vivo. Enzyme activity measured by 14CO2 production reached peak values in 2-3 hr and returned to baseline in 5 hr. Glucose, fructose or glycerol completely prevented the rise in conversion of [14C-2]tryptophan produced by hydrocortisone hemisuccinate when ***administered*** at doses of 12 or 16 mmoles 0.5 hr before the steroid. Lower doses had less effect. The potencies of the compounds in inhibiting acute increases in ***TPO*** activity produced by hydrocortisone hemisuccinate were in the order glycerol greater than fructose greater than glucose. Chronic Triamcinolone ***treatment*** elevated in vivo ***TPO*** activity by 2.5-fold and in vitro ***TPO*** activity by 5-fold. The chronic elevation of in vivo ***TPO*** by Triamcinolone could be arrested within 1 hr by an intragastric fructose load. The present finding, that acute or chronic glucocorticoid-induced increases in in vivo ***TPO*** activity were rapidly blocked by intragastric carbohydrate loads, is consistent with the view that dietary carbohydrates modulate hepatic ***TPO*** activity via feedback repression and not by a cessation of ***TPO*** enzyme synthesis.

L2 ANSWER 253 OF 299 MEDLINE

AN 83177098 MEDLINE

TI Differences in iodinated peptides and thyroid hormone formation after chemical and thyroid peroxidase-catalyzed iodination of human thyroglobulin.

AU Turner C D; Chernoff S B; Taurog A; Rawitch A B

NC AM-18896
AM-03812

SO ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1983 Apr 1) 222 (1) 245-58.
Journal code: 6SK. ISSN: 0003-9861.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 8307

AB The distribution of iodine among the polypeptides of human goiter thyroglobulin (Tg) was examined. Tg was iodinated in vitro with 131I to levels of 2 to 84 gram atoms (g.a.)/mol using thyroid peroxidase (***TPO***) or a chemical iodination system. The samples were reduced, alkylated, and subjected to sodium dodecyl sulfate-polyacrylamide gel electrophoresis. Two low-molecular-weight peptides appeared preferentially in radioautograms of the sodium dodecyl sulfate (SDS) gels of ***TPO*** -iodinated samples. Iodination of these peptides increased sharply in the ***TPO*** - ***treated*** Tg as the level of total iodine/molecule rose. Radioiodine was incorporated into these same gel regions in the chemically ***treated*** Tg, but only after much higher levels of total iodination were reached. Differences in iodoamino acid distribution were also noted between the chemically and enzymatically iodinated thyroglobulins. In the chemically iodinated samples, little thyroxine (T4) was synthesized, even at high iodine levels. In the ***TPO*** - ***treated*** samples only small amounts of T4 were seen below 14 g.a. total I/mol, while at or above that level of iodination T4 formation increased sharply. To examine the coupling process, Tg was chemically iodinated, excess I- removed, and the samples ***treated*** with ***TPO*** and a H2O2-generating system in the absence of iodide. Radioautograms obtained from SDS-polyacrylamide gels of reduced and alkylated protein from such coupling assays showed an increase in the level of iodine in the low-molecular-weight peptides after ***TPO*** ***treatment*** . Thyroxine production also increased with ***TPO*** ***treatment*** . The addition of free DIT (a known coupling enhancer) to the [131I]Tg/ ***TPO*** incubation increased both the production of T4 and the amount of iodine in the smaller polypeptides. Two-dimensional maps prepared from CNBr-digested TG showed differences between the coupled and uncoupled samples. Our observations confirm the importance of the low-molecular-weight peptides derived from Tg in thyroid hormone synthesis. At total iodine levels above 14 g.a./mol Tg in enzymatically ***treated*** samples there is selective incorporation of iodine into both the low-molecular-weight polypeptides and into thyroid hormone.

L2 ANSWER 254 OF 299 MEDLINE

AN 83146628 MEDLINE

TI Partial purification and biological properties of ***thrombopoietin*** extracted from the urine of aplastic anemia patients.

AU Miyake T; Kawakita M; Enomoto K; Murphy M J Jr

SO STEM CELLS, (1982) 2 (3) 129-44.
Journal code: UZH. ISSN: 0250-6793.

CY Switzerland

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 8306

AB Thrombopoietic (***Tpo***) and megakaryocyte-colony stimulating (Meg-CSF) activities were found in urinary extracts from patients with aplastic anemia. Preparative biochemical extractions were accomplished using Sephadex G-50 and DEAE-cellulose column chromatography. The biological activities of these extracts were assessed using not only an in vivo assay but were also examined in vitro employing the clonal development of megakaryocyte colonies. Both in vivo, as well as in vitro, biological activities were detected in the batch fraction which was stepwise eluted from DEAE-cellulose between 0.022 M NaCl in 0.016 M NaH2PO4 and 0.15 M NaCl in 0.05 M Na2HPO4 as a single fraction. When 0.4 mg of this fraction was injected daily into rats, a marked thrombopoiesis ensued producing an increase of 40% over initial platelet counts by 3 days after ***administration*** . This was followed by a

decrease in platelets to a subnormal range by 21 days after the injection. Hemoglobin concentration gradually increased from 5% above initial value by day 7 to 20% above initial value by day 21. The effect of neuraminidase (NAse) on the properties of this extract was also examined. NAse- ***treated*** extracts, similar to the native extracts described above retained ***Tpo*** activity. Changes in megakaryocyte numbers in the spleen and bone marrow of rats were assayed with both the NAse- ***treated*** extract as well as with the native extract. A remarkable increase in megakaryocyte numbers, threefold above the normal count, was found in the spleens of rats given the native extract preparation; by contrast, however, no change was observed in splenic megakaryocyte numbers in rats given the NAse- ***treated*** extract. On the other hand, NAse- ***treated*** extract retained its ability to stimulate bone marrow megakaryocyte proliferation in the same rat. The urinary extract also revealed in vitro Meg-CSF activity with a specific activity of 31, 750 CFU-Meg colonies/mg of protein.

L2 ANSWER 255 OF 299 MEDLINE
AN 83070512 MEDLINE
TI Ontogeny of thyroid peroxidase activity in perinatal rats.
AU Fukiishi Y; Harauchi T; Yoshizaki T; Hasegawa Y; Eguchi Y
SO ACTA ENDOCRINOLOGICA, (1982 Nov) 101 (3) 397-402.
Journal code: 0NC. ISSN: 0001-5598.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8303
AB The ontogeny of thyroid peroxidase (***TPO***) activity was investigated in rat foetuses and neonates. From day 19 to 22 of gestation in intact pregnant rats, the ***TPO*** activity in their foetuses increased with foetal age. Following maternal ***treatment*** with propylthiouracil (PTU), the ***TPO*** activity markedly increased in foetuses on and after day 20 of gestation. The ***TPO*** activity in encephalectomized foetuses increased as markedly as that in intact littermates, whereas that in hypophysectomized littermates failed to increase. Newborn rats nursed by mothers ***treated*** with PTU had a ***TPO*** activity similar to that in controls of untreated mothers. There was also no difference in the ***TPO*** activity between hypophysectomized adult females and intact adult ones. These observations show that in foetal rats, ***TPO*** activity increases disproportionately to the thyroid weight, but not in newborn and adult rats, and suggest that preferential synthesis of this enzyme occurs in addition to cell hypertrophy during foetal life.

L2 ANSWER 256 OF 299 MEDLINE
AN 82144121 MEDLINE
TI Thyroid hormone formation catalyzed by human thyroid peroxidase: a new and physiological measurement of thyroid peroxidase.
AU Sugawara M; Hagen G A
SO JOURNAL OF LABORATORY AND CLINICAL MEDICINE, (1982 Apr) 99 (4)
580-8.
Journal code: IVR. ISSN: 0022-2143.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 8207
AB This report describes a method for measurement of ***TPO*** activity by the amount of thyroid hormone production. Thyroid hormone formation was accomplished by incubating purified iodine-poor Tg with human ***TPO*** for 60 min at 37 C in the presence of free DIT, KI, and an H2O2 source. Newly formed T3 and T4 were measured by radioimmunoassay of the Tg hydrolysates. With this method, ***TPO*** -catalyzed iodination of Tg and thyroid hormone formation were measured simultaneously from eight normal thyroid glands and 15 thyroid glands from MMI- ***treated*** patients with Graves' disease. Graves' disease ***TPO*** showed iodinating activity and T4 formation which was higher than that of ***TPO*** from normal thyroids, and there was a positive linear correlation between the iodinating activity and the amount of T4 formation. T3 production by highly active ***TPO*** , however, dissociates from the amount of T4 formation and the degree of Tg iodination. Thus, if the activity of ***TPO*** is to be measured by the amount of thyroid hormone production, T4 should be used rather than T3. The method of thyroid hormone formation described here provides a new and physiological measurement of ***TPO*** activity and should be useful for investigation of the role of human ***TPO*** in thyroid hormone formation.

L2 ANSWER 257 OF 299 MEDLINE
AN 82073001 MEDLINE
TI Effects of antiplatelet serum and ***thrombopoietin*** on the percentage of small acetylcholinesterase-positive cells in bone marrow of mice.
AU Kalmaz G D; McDonald T P
NC HL 06072
HL 14637
SO EXPERIMENTAL HEMATOLOGY, (1981 Nov) 9 (10) 1002-10.
Journal code: EPR. ISSN: 0301-472X.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8204
AB Megakaryocytopoiesis was evaluated in the marrow of mice after they had been injected with rabbit anti-mouse platelet serum (RAMPS) or a thrombocytopoiesis-stimulating factor (TSF or ***thrombopoietin***). For controls, other mice were injected with normal rabbit serum or saline. All materials were given as single intraperitoneal injections; at frequent intervals of up to seven days the mice were killed. RAMPS caused severe thrombocytopenia in mice with significant rebound-thrombocytosis following five to seven days later. TSF did not significantly increase platelet counts of mice. Both RAMPS and TSF increased the proportion of the small acetylcholinesterase positive (SAChE+) cells in the marrow of mice which was elevated 3-fold above control values at 8-10 h after ***treatment*** . The percentage of SAChE+ cells returned to control levels by 48 h and to below control values by 64-168 h. These data indicate that both exogenous TSF and endogenously produced TSF released in response to acute thrombocytopenia caused a transitory increase in the percentage of SAChE+ cells in mice.

L2 ANSWER 258 OF 299 MEDLINE
AN 82022170 MEDLINE
TI [Double-blind comparative trial of trimethoprim-polymyxin B and trimethoprim-sulphacetamide-polymyxin B ear drops in the ***treatment*** of otorrhoea (author's transl)].
Etude comparative `a double insu sur les solutions otiques de trimethoprime - polymyxine B et de trimethoprime - sulfacetamide - polymyxine B dans le traitement de l'otorrhee.
AU Gyde M C
SO ANNALES D OTO-LARYNGOLOGIE ET DE CHIRURGIE CERVICO-FACIALE, (1981)
98 (1-2) 37-40.
Journal code: 5QO. ISSN: 0003-438X.
CY France
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA French
FS Priority Journals
EM 8201
AB The purpose of his double-blind, randomized trial was to compare ear drops containing either trimethoprim and polymyxin B (TP) or trimethoprim, sulphacetamide and polymyxin B (***TSP***) from the points of view of effectiveness and safety. The 68 patients ***treated*** had otitis externa or recurrent otitis media with perforated ear-drum, or mastoid cavity with post-tympanoplasty infection. Satisfactory results were obtained in 60.6% of the cases with TP and in 88.6% with ***TSP*** . When evaluated by the Chi-square method with Yates' correction, the difference was statistically significant. There was no evidence of ototoxicity, fungal infection or local hypersensitivity with either preparation. The trial demonstrated that both ear drops were active and that ***TSP*** was much more effective than TP in the ***treatment*** of otorrhea.

L2 ANSWER 259 OF 299 MEDLINE
AN 81189003 MEDLINE
TI Characterization of a thrombocytopoietic-stimulating factor from kidney cell culture medium.
AU McDonald T P; Andrews R B; Clift R; Cottrell M
NC HL 14637
SO EXPERIMENTAL HEMATOLOGY, (1981 Mar) 9 (3) 288-96.
Journal code: EPR. ISSN: 0301-472X.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)

LA English
FS Priority Journals
EM 8109

AB The chemical characteristics of a thrombocytopoietic-stimulating factor (TSF or ***thrombopoietin***) found in serum-free kidney cell culture medium were further delineated by subjecting the TSF-rich medium to varying temperatures, different pH, and trypsin digested; the ability of TSF to bind lectins on affinity chromatography was also determined. After ***treatment*** , the TSF was assayed in immunothrombocythemic mice by its ability to increase the incorporation of 35S-sodium sulfate into newly formed platelets. TSF appeared to be relatively heat stable; incubation of TSF for 16 h at temperatures of 4, 37, and 56 degrees C showed no loss of TSF activity. However, after incubation at 85 degrees C, TSF was completely inactivated TSF in culture medium was stable of pH 1-8. Above these pH values, the potency of the TSF material decreased sharply. Digestion of TSF with trypsin completely destroyed the thrombocytopoietic-stimulating activity. For TSF purification, two different lectin-agarose derivatives were used; i.e., wheat germ agglutinin (WGA) and concanavalin A (Con A). Both lectins bound TSF, and the hormone was eluted by the sugars specific for the particular lectin. lectins, therefore, can be used to partially purify the hormone; a further 10 to 200-fold purification was achieved by these techniques. Since other workers have shown that TSF from plasma of thrombocytopenic rabbits will bind WGA and Con A, TSF from kidney cell culture medium and TSF from animal sources appear to have similar carbohydrate compositions.

L2 ANSWER 260 OF 299 MEDLINE
AN 81161542 MEDLINE
TI Humoral control of thrombopoiesis.
AU Levin J; Evatt B L
NC HL 01601
SO BLOOD CELLS, (1979 Mar 23) 5 (1) 105-21.
Journal code: A8H. ISSN: 0340-4684.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8108
AB There is increasing evidence that an important mechanism by which platelet production is regulated depends upon a humoral substance (***thrombopoietin***) that affects the production of platelets by megakaryocytes. Plasma from thrombocytopenic donors increases the rate of appearance or concentrations of subsequently ***administered*** Na235SO4 or selenomethionine-75Se in platelets. Both isotopes are initially incorporated into the cytoplasm of megakaryocytes, and labeled platelets appear in the circulation after their production and release from megakaryocytes. Thrombopoiesis-stimulating activity also can be detected in the plasma of normal donors when endogenous thrombopoiesis has been suppressed in recipient assay animals by the hypertransfusion of platelets. Recent studies have indicated that certain fractions of plasma from throbocytopenic donors are also capable of stimulating thrombopoiesis in recipient animals. The nature of ***thrombopoietin*** (s) and its mechanism of action remain unknown. However, currently available data indicate that thrombopoiesis-stimulating factors may act both on diploid precursors and immature megakaryocytes and upon maturing megakaryocytes. The site of production of ***thrombopoietin*** also is unknown. Although the sensor that regulates ***thrombopoietin*** or other humoral mediators of thrombopoiesis has not been identified, it appears that platelet numbers, per se, are not the sole variable to which megakaryocytopoiesis eventually responds.

L2 ANSWER 261 OF 299 MEDLINE
AN 81139978 MEDLINE
TI [Thrombopoietic activity induced by blood withdrawal and ***administration*** of antithrombocyte serum in nephrectomized rats. Role of kidneys in the production of ***thrombopoietin***].
Untersuchung der durch Blutentzug und Gaben von Antithrombozytenserum erzeugten thrombopoetischen Aktivitat bei nephrektomierten Ratten. Zur Rolle der Niere bei der Erzeugung von Thrombopoetin.
AU Krizsa F; Borbenyi Z; Arokszallasy E; Cserhati I
SO FOLIA HAEMATOLOGICA. INTERNATIONALES MAGAZIN FUR KLINISCHE UND
MORPHOLOGISCHE BLUTFORSCHUNG, (1980) 107 (4) 683-7.
Journal code: F0F.
CY GERMANY, EAST: German Democratic Republic
DT Journal; Article; (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 8107
AB The thrombopoietic serum activity was examined in rats during thrombocytopenia produced by bleeding or after ***treatment*** with antithrombocyte serum (ATS). 6 hours after both ***treatments*** the thrombopoietic activity of the serum, i.e. its content of ***thrombopoietin*** , is increased. After the ATS ***treatment*** of nephrectomized animals a similar increase of thrombopoietic activity as in normal animals could be achieved. In contrast to that, no similar increase of thrombopoietic activity was observed in nephrectomized animals after blood loss. According to the results of the authors the increase of thrombopoietic activity produced by different stimuli can be attributed to different mechanisms.

L2 ANSWER 262 OF 299 MEDLINE
AN 81118582 MEDLINE
TI A double-blind comparative study of trimethoprim-polymyxin B versus trimethoprim-sulfacetamide-polymyxin B otic solutions in the ***treatment*** of otorrhea.
AU Gyde M C
SO JOURNAL OF LARYNGOLOGY AND OTOLOGY, (1981 Mar) 95 (3) 251-9.
Journal code: IWN. ISSN: 0022-2151.
CY ENGLAND: United Kingdom
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 8106
AB This was a double-blind randomized study to compare the safety and efficacy of trimethoprim-polymyxin B (TP) and trimethoprim-sulfacetamide-polymyxin B (***TSP***) drops in the ***treatment*** of otorrhea. The 68 cases ***treated*** suffered from external otitis, recurrent otitis media with tympanic membrane perforation, or infected mastoid cavities and post-operative tympanoplasties. The TP ototopical solution was successful in 60.6 per cent of cases compared to 88.6 per cent of cases with ***TSP*** . These rates were statistically different using the Chi Square with Yates' correction method. There were no signs of ototoxicity, fungal infection overgrowth or local sensitivity to either of the solutions. The study has shown that both drugs are equally safe and that ***TSP*** is significantly more effective in the ***treatment*** of otorrhea.

L2 ANSWER 263 OF 299 MEDLINE
AN 81111908 MEDLINE
TI Heterogeneity of a labeled tumor surface protein from a murine lung carcinoma demonstrated by two-dimensional electrophoresis.
AU Elsinger R W; Kennel S J
NC CA 24553-01
T01 CA 05296
T 32 CA 90336
SO CANCER RESEARCH, (1981 Mar) 41 (3) 877-81.
Journal code: CNF. ISSN: 0008-5472.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8106
AB Heterogeneity of a tumor surface protein (designated ***TSP*** -180) has been demonstrated by two-dimensional electrophoresis. Line 1 carcinoma cells derived from a spontaneous alveolar carcinoma of BALB/c mice were labeled externally with 125I by use of lactoperoxidase or metabolically with [3H]-leucine before cell proteins were solubilized with Triton X-100 detergent. Immunoprecipitates prepared with heterologous antisera allowed comparison of two-dimensional patterns of line 1 surface proteins labeled with 125I or 3H. The isoelectric point of 125I-labeled ***TSP*** -180 was heterogeneous and varied between 6.1 and 6.3. ***Treatment*** with neuraminidase shifted the pI values to between 5.9 and 6.1 and reduced, but did not eliminate, the banding heterogeneity. These data show that charge heterogeneity due to sialization, as well as other factors, exists in ***TSP*** -180.

L2 ANSWER 264 OF 299 MEDLINE

AN 81071560 MEDLINE
TI Time-course of changes of liver tryptophan pyrrolase (tryptophan oxygenase) and liver and kidney glucose-6-phosphatase in rats shifted from high- to zero-protein diets.
AU Nath N
SO JOURNAL OF NUTRITIONAL SCIENCE AND VITAMINOLOGY, (1980) 26 (3)
261-9.
Journal code: JFD. ISSN: 0301-4800.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8104
AB Time-courses of changes in the activities of liver and kidney glucose-6-phosphatase [EC 3.1.3.9] and hepatic tryptophan pyrrolase [EC 1.13.1.12; ***TPO***] in rats pre-fed high-protein diets for 5 days and then shifted to zero-protein diets were studied. Liver glucose-6-phosphatase activity decreased 1 day after the dietary shift but then increased and remained significantly higher than the 0 day value for the next 2 days. Changes in liver glycogen were found to be intimately and inversely related to liver glucose-6-phosphatase activity. Changes in kidney glucose-6-phosphatase activity paralleled the pattern of changes observed in liver activity. An initial decrease in ***TPO*** activity was followed by increased enzyme activity up to the 3rd day of the dietary shift. Later there was a rapid fall in tryptophan pyrrolase activity. Changes observed in these specific enzyme proteins differed from those observed in total tissue proteins. Alterations in the activities of these enzymes and changes in other parameters are compared with those observed earlier with the reverse type of dietary shift.

L2 ANSWER 265 OF 299 MEDLINE
AN 80264390 MEDLINE
TI Influence of non-steroidal anti-inflammatory compounds on the hepatic tryptophan pyrrolase activity in hypo- and hyperthyroid rats.
AU Franzone J S; Cravanzola C; Reboani M C
SO ARCHIVES INTERNATIONALES DE PHARMACODYNAMIE ET DE THERAPIE, (1980
May) 245 (1) 156-65.
Journal code: 7EK. ISSN: 0003-9780.
CY Belgium
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8012
AB Hypothyroid state induced in the rat by thyroparathyroidectomy does not modify the activity of hepatic tryptophan pyrrolase (***TPO***) while hyperthyroidism, obtained after daily injection of 3, 3', 5-triiodo-L-thyronine, inhibits significantly the liver ***TPO*** activity. ***Treatment*** with oxametacine, indomethacin, phenylbutazone, flufenamic acid and acetylsalicylic acid, increases the activity of hepatic ***TPO*** in hypothyroid state, whereas, in hyperthyroid rats, the same drugs are able to restore the normal enzymatic activity, except for acetylsalicylic acid. During the development of an acute inflammatory process, provoked by carrageenan injection, the ***treatment*** with non-steroidal anti-inflammatory agents induces an enhancement of hepatic ***TPO*** activity. On the contrary, such enzymatic activity appears unaffected in chronic inflammation induced by cotton-pellet implantation.

L2 ANSWER 266 OF 299 MEDLINE
AN 80241105 MEDLINE
TI Acquired hypomegakaryocytic thrombocytopenic purpura. Occurrence in a patient with absent thrombopoietic stimulating factor.
AU Hirsh E H; Vogler W R; McDonald T P; Stein S F
SO ARCHIVES OF INTERNAL MEDICINE, (1980 May) 140 (5) 721-3.
Journal code: 7FS. ISSN: 0003-9926.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 8011
AB A 49-year-old woman had purpura and thrombocytopenia not associated with drugs or identifiable underlying disease. The platelet survival was normal and the marrow showed a sharp reduction in megakaryocytes with preservation of other cell lines. There was no response to steroids or infusion of fresh frozen plasma. Lithium carbonate ***therapy*** similarly had no effect. Thrombopoietic activity was absent in serum and urine samples. Erythropoietin activity was normal. In vitro formation of granulocyte-macrophage colonies in soft agar was normal. The case represents a unique incidence of selective megakaryocytic hypoplasia, though to result from a failure in stem cell differentiation.

L2 ANSWER 267 OF 299 MEDLINE
AN 80179310 MEDLINE
TI Partial purification of hog thyroid peroxidase using detergent ***treatment*** and its spectral changes induced by hydrogen peroxide (author's transl).
AU Ohtaki S; Nakagawa H
SO NIPPON NAIBUNPI GAKKAI ZASSHI. FOLIA ENDOCRINOLOGICA JAPONICA, (1979
Dec 20) 55 (12) 1570-81.
Journal code: EZV. ISSN: 0029-0661.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA Japanese
FS Priority Journals
EM 8009
AB Thyroid peroxidase (***TPO***) was partially purified from hog thyroid microsomes after solubilization by means of deoxycholate ***treatment*** followed by ammonium sulfate farctionation and affinity chromatography with Con A Sepharose. The absorption spectra of the preparation showed the maxima at around 410 nm for oxidized form, 422 nm for dithionite-reduced form and 422 nm for CO complex of reduced form. The cyanide difference spectrum showed a peak at 431 nm and a trough at 403 nm. This preparation was contaminated with little cytochrome b5 and it was shown that the ***TPO*** preparation was able to be used for the following spectrophotometric experiments. The addition of H2O2 to the ***TPO*** preparation induced the characteristic change in the difference spectrum with a peak at 430 nm and a trough at 407 nm, which was gradually disappeared in a few minutes, but at the high concentration of H2O2 (35 muM) the trough at 411 nm was observed after decomposition of H2O2, accompanying loss of peroxidase activity. This deepening of the trough caused the heme degradation which was dependent with the concentration of H2O2 added and to less extent at the low concentration of H2O2 (3.5 MUM). Since the difference spectrum produced by the addition of small amount of H2O2 disappeared rapidly after the addition of KI or ascorbate and resembled the spectral change due to the formation of Compound II in the reaction of other perioxidases, it was concluded that the difference spectrum with a peak at 430 nm and a trough at 407 nm observed after the addition of H2O2 was ascribable to the formation of Compound II of ***TPO*** . Although Compound I was not observed under the experimental conditions used, the results were accounted for the presence of I bound to ***TPO*** or other endogeneous reducing agents. We tentatively concluded that Compound I and Compound II are formed in the reaction of ***TPO*** with H2O2 as well as in that of horseradish peroxidase.

L2 ANSWER 268 OF 299 MEDLINE
AN 80166506 MEDLINE
TI [Modification of a biological method of determining thrombocytopoietin].
Modifikatsiia biologicheskogo metoda opredeleniia trombotsitopoetina.
AU Putintseva E G
SO PATOLOGICHESKAIA FIZIOLOGIIA I EKSPERIMENTALNAIA TERAPIIA, (1979
Nov-Dec) (6) 66-8.
Journal code: OTF. ISSN: 0031-2991.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
EM 8008

L2 ANSWER 269 OF 299 MEDLINE
AN 80126529 MEDLINE
TI Congenital goitre due to "thyroid peroxidase-iodinase defect".
AU Niepomniszcze H; Coleoni A H; Targovnik H M; Iorcansky S; Degrossi O J
SO ACTA ENDOCRINOLOGICA, (1980 Jan) 93 (1) 25-31.
Journal code: 0NC. ISSN: 0001-5598.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals

EM 8006

AB A 16-year-old male cretin with congenital goitrous hypothyroidism and 95% discharge in the perchlorate test underwent thyroidectomy. Thyroid studies disclosed negligible peroxidase (***TPO***) activity in the tyrosine iodinase assay, 6 nmoles I- inc./g (normals: 220-410). Using the same particulate preparations, a high activity was obtained in the guaiacol assay, 485 U/mg vs. 176 U/mg of a control gland. Goitre ***TPO*** was solubilized by ***treating*** the thyroid pellets with deoxycholate, trypsin and acetone. Soluble goitre ***TPO*** was further purified on Sephadex G-200. By this procedure we obtained a single peak of enzyme activity for oxidizing guaiacol, although no activity was found for iodinating tyrosine. I2 formation, as measured by the triiodide assay, was only 28% of that expected for normal ***TPO*** when compared for guaiacol oxidation. It is concluded that this abnormal ***TPO*** was the cause of the congenital hypothyroidism of the patient. We suggest the term "thyroid peroxidase-iodinase defect" for defining this newly found inborn error.

L2 ANSWER 270 OF 299 MEDLINE
AN 79127426 MEDLINE
TI The irreversible inactivation of thyroid peroxidase by methylmercaptoimidazole, thiouracil, and propylthiouracil in vitro and its relationship to in vivo findings.
AU Davidson B; Soodak M; Neary J T; Strout H V; Kieffer J D; Mover H; Maloof F
SO ENDOCRINOLOGY, (1978 Sep) 103 (3) 871-82.
Journal code: EGZ. ISSN: 0013-7227.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 7907
AB A reinvestigation of the mechanism of action of methylmercaptoimidazole, propylthiouracil, and thiouracil on thyroid peroxidase (***TPO***) was undertaken. A preliminary incubation of ***TPO*** and H2O2 with methylmercaptoimidazole, propylthiouracil, or thiouracil was carried out in the absence of oxidizable substrates (i.e. I- or guaiacol). This incubation resulted in irreversible inactivation of ***TPO*** . The extent of inactivation could be determined after removal of the drug by gel filtration or by dilution into the assay mixture. Preincubation, as above, in the presence of iodide or thiocyanate prevented the irreversible inactivation of ***TPO*** . Rats receiving doses of these drugs which completely inhibited protein-bound iodine formation showed normal levels of ***TPO*** in their thyroid glands 30 min after drug ***administration*** . These findings suggest that the initial in vivo action of these drugs is to block iodination by trapping oxidized iodide, not by acting as "general inhibitors" of the ***TPO*** .

L2 ANSWER 271 OF 299 MEDLINE
AN 79074750 MEDLINE
TI [Preventive effect of inhibitors of catecholamine synthesis, serotonin and adrenoblockaders on anovulatory syndrome development in neonatally androgenized rats. 2].
Preventivnoe deistvie ingibitorov sinteza katekholaminov, serotonina i adrenoblokatorov na vozniknovenie anovuliatornogo sindroma u neonatal'no androgenizirovannykh krys. Soobshchenie 2.
AU Nosenko N D; Reznikov A G
SO PROBLEMY ENDOKRINOLOGII, (1978 Nov-Dec) 24 (6) 69-73.
Journal code: PNH. ISSN: 0032-9509.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 7904
AB ***Administration*** to female rats of 250 micrograms of testosterone propionate (***TSP***) on the 3rd day of postnatal life led to reduction of estradiol, progesterone, and, to a lesser degree, of lutropin in the blood plasma of these animals at the age of 3 months. There was an increase of the lutropin content in the adenohypophysis and of luliberin in the hypothalamus. Combined with ***TSP*** ***administration*** of alpha-methyl-p-tyrosine, p-chlorphenylalanine or droperidol promoted preservation of cyclic changes in the hypothalamic gonadotropin activity and partially prevented disturbances of estradiol and progesteron secretion caused by neonatal androgenization. The mechanisms of participation of biogenic monoamines in sex differentiation of the hypothalamus are discussed.

L2 ANSWER 272 OF 299 MEDLINE
AN 79042259 MEDLINE
TI Isolation of a product from the trypsin-digested glycoprotein of sciatic nerve myelin.
AU Roomi M W; Eylar E H
SO BIOCHIMICA ET BIOPHYSICA ACTA, (1978 Sep 26) 536 (1) 122-33.
Journal code: A0W. ISSN: 0006-3002.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7903
AB When purified rabbit sciatic nerve myelin, whether lyophilized or not, is ***treated*** with low amounts of trypsin (25 microgram/ml) for 0.5, 3, or 24 h the resulting protein patterns viewed on sodium dodecyl sulfate (SDS) gel electrophoresis are similar. The most striking feature of the trypsinized myelin is the accumulation of a heavy band at the basic protein position, molecular weight 19 000, which is accounted for as a degradation product of the PO protein, referred to as the ***TPO*** protein. The PO protein, the major glycoprotein of sciatic nerve myelin, as well as the 23K and P2 proteins and albumin, an absorbed component, are all partially degraded; most high molecular weight bands are lost. The ***TPO*** protein, isolated by gel filtration in 2% SDS on an agarose column, like the PO protein, is highly insoluble in aqueous solvents. It is a glycoprotein (8% carbohydrate), staining with periodic acid-Schiff reagent; containing 3 mannose, 1 galactose, 3 N-acetylglucosamine, 1 sialic acid, and 1 fucose residues and is identical to the nonasaccharide of the parent PO protein. The amino acid composition of the ***TPO*** protein, is similar to the PO protein, but has a much higher content of hydrophobic residues and begins with NH2-methionine. This suggests that the PO protein is an amphipathic membrane protein in which its more polar character is confined to the first third of its NH2-terminus. This polar domain is probably positioned above the lipid leaflet where it is accessible to trypsin which cleaves a sensitive lysinyl (or argininyl)-methionine linkage. The more hydrophobic domain (the ***TPO*** protein) is buried in the myelin bilayer where it is protected from further tryptic attack. Thus trypsin can serve as a useful probe of myelin structure.

L2 ANSWER 273 OF 299 MEDLINE
AN 79018463 MEDLINE
TI The action of trypsin on central and peripheral nerve myelin.
AU Eylar E H; Roomi M W
SO ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY, (1978) 100 307-28.
Journal code: 2LU. ISSN: 0065-2598.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7901
AB In contrast to other studies, our results demonstrate that low concentration of trypsin degrades a high proportion of proteolipid from CNS myelin. The Wolfgram protein and BP are vulnerable and completely lost on trypsinolysis, perhaps accounting for some of the peptides retained by the myelin. In PNS myelin, the major PO protein, a hydrophobic glycoprotein, is readily degraded to a stable 18,000--19,000 molecular weight unit, referred to as ***TPO*** protein, still retaining the carbohydrate unit which probably exists as a nonasaccharide grouping. Production of the ***TPO*** glycoprotein results from cleavage of a lysinyl-methionine or arginyl-methionine linkage probably found approximately 80--100 residues from the NH2-terminal isoleucine of the PO molecule. This linkage must be especially accessible to trypsin since the ***TPO*** protein is also generated in high yield when isolated PO protein is ***treated*** with trypsin in solution for 0.5 hours. Further incubation for 24 hours fully degrades the ***TPO*** protein to over 20 tryptic peptides, shown by peptide mapping, unlike the situation in myelin where the ***TPO*** unit is stable and resists further proteolysis. The ***TPO*** unit is also produced when PO protein is ***treated*** with BrCN. The PO protein contains 3 methionine residues but presumably the methionine residue in the trypsin-sensitive region is crucial; cleavage leads to the same ***TPO*** unit minus NH2-terminal methionine. Another methionine residue also exists in the ***TPO*** protein but it may be resistant to BrCN cleavage or else occupy a near-end position. Other proteins were also identified on PAGE of trypsinized

PNS myelin: albumin, P2 protein, and PO protein. Albumin and P2 protein were identified in the acidic extract by reaction with specific antibody. The PO protein was isolated; it moved similarly to standard protein on SDS-PAGE and gave the appropriate amino acid analysis. However, it cannot be determined at this time whether a portion of these proteins remains because they are partially inaccessible to trypsin, or else are slightly attacked and thus represent early stages of trypsinolysis. The P2 protein of trypsinized myelin appears to migrate slightly faster than standard P2 protein on PAGE. Further work should clarify this point. Amino acid analysis and sequence data show that the PO protein is particularly hydrophobic, very likely existing in PNS myelin as an amphipathic molecule which penetrates the bilayer but which has a hydrophilic portion exposed. It is this hydrophilic region that contains much lysine, particularly the crucial lysinyl-methionine linkage, that is so trypsin-sensitive. Determination of the amino acid sequence of terminal portions of the isolated PO and ***TPO*** proteins serves to firmly establish the PO protein as a unique entity probably exclusive to PNS myelin. It can be concluded that the study of trypsin activity toward PNS myelin has made possible a new understanding of how proteins are positioned in the membrane, and provided valuable insight into the PO protein.

L2 ANSWER 274 OF 299 MEDLINE
AN 78223304 MEDLINE
TI On the formation of rho - petites in yeast. III. Effects of temperature on transmission and recombination of mitochondrial markers and on rho - cell formation in temperature sensitive mutants of Saccharomyces cerevisiae.
AU Backhaus B; Schweyen R J; Kaudewitz F
SO MOLECULAR AND GENERAL GENETICS, (1978 May 3) 161 (2) 153-73.
Journal code: NGP. ISSN: 0026-8925.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7811
AB The rho-factor stability is shown to be affected by four conditional mutations, tsm-8 (mitochondrial), ***tsp*** -20, ***tsp*** -25 and ***tsp*** -30 (nuclear). Growth of mutant cells at high temperature (35 degrees C) results in the rapid production of rho - cells and concomittantly in the decrease of the ability to transmit mitochondrial genetic information to the rho + progeny of crosses. Kinetics of rho - cell formation during growth at 35 degrees C have been compared with variations in transmission and recombination of mitochondrial markers in crosses. In all cases the transmission of mitochondrial markers of the ts-parent decreases as the number of cell generations increases. The frequencies of recombinants between mitochondrial markers either increase or decrease depending on the markers considered and the alleles of the omega-locus involved in the crosses. The results of all crosses performed have been compared with the predictions of the model for recombination and segregation of mitochondrial genes proposed by Dujon et al. (1974). This comparison indicates that the main result of high temperature ***treatment*** is a diminution of the input of mitochondrial information from the ts-parent into zygotes. Consequences of the induced variations of input follow the predictions of the model. The correlation found in ts-strains between the reduction of input in crosses and the formation of rho - cells is discussed in terms of molecular events occurring in mitDNA molecules during high temperature induction of rho + to rho - mutation.

L2 ANSWER 275 OF 299 MEDLINE
AN 78185457 MEDLINE
TI [Double-blind comparative study of trimethroprim-sulphacetamide-polymyxin b and gentamicin in the ***treatment*** of otorrhoea (author's transl)].
Etude comparative `a double insu de la trimethorprime-sulfacetamide=polymyxine B et de la gentamicine dans le traitement de l'otorrhee.
AU Gyde M C; Randall R F
SO ANNALES D OTO-LARYNGOLOGIE ET DE CHIRURGIE CERVICO-FACIALE, (1978 Jan-Feb) 95 (1-2) 43-55.
Journal code: 5QO. ISSN: 0003-438X.
CY France
DT (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA French
FS Priority Journals
EM 7809
AB A double-blind comparative study of the use of Garamycine (gentamicin) ear drops and ***TSP*** (trimethroprim-sulphacetamide-polomyxin B) ear drops in the ***treatment*** of 100 cases of otorrhoea due to external otitis, a recurrent otitis media accompanied by perforation of the drum, an infection of the mastoid cavity or a postoperative infection, provided evidence of the effectiveness of both medications. ***TSP*** ear drops gave positive results in 42 out of 50 cases ***treated*** , whilst for gentamicin aural solution results were positive for 46 out of 50 cases. Gentamicin gave a successful result in 5 of the 8 failures with ***TSP*** , whilst ***TSP*** cured the four original failures with gentamicin. There were no signs of ototoxicity, of excessive fungal proliferation nor of any local sensitivity to the ear drops. It would seem that these aural preparations are complementary, capable of resulting in the disappearance of the majority of bacterial agents responsible for pathogenic otorrhoea.

L2 ANSWER 276 OF 299 MEDLINE
AN 78064481 MEDLINE
TI Effect of a low dose of vincristine on platelet production in mice.
AU Mandel E M; Bessler H; Djaldetti M
SO EXPERIMENTAL HEMATOLOGY, (1977 Nov) 5 (6) 499-504.
Journal code: EPR. ISSN: 0301-472X.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7804
AB The effect of a single low dose (0.1 mg/kg) of vincristine (VCR) on platelet production was investigated in C57B1 mice. A parallel increase of circulating platelets and (75Se)-selenomethionine (Se-Met) uptake was observed. The total megakaryocyte count decreased insignificantly 6 hours after VCR injection, followed by an increase after 18 hours. Plasma taken from mice 24 hours after VCR injection was tested for thrombopoietic activity. The post-VCR plasma caused a significant thrombocytosis, increased Se-Met uptake and increased protein synthesis of the platelets, indicating an active overproduction of platelets. These results suggest that the thrombocytosis induced by a low dose of VCR is mediated by a ***thrombopoietin*** -like substance.

L2 ANSWER 277 OF 299 MEDLINE
AN 78013691 MEDLINE
TI Serum thrombopoietic activity following ***administration*** of vinblastine.
AU Klener P; Marcibal O; Donner L; Kornalik F
SO SCANDINAVIAN JOURNAL OF HAEMATOLOGY, (1977 Sep) 19 (3) 287-92.
Journal code: UCV. ISSN: 0036-553X.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7801
AB A possible role of humoral factors in the pathogenesis of vinblastine-induced thrombocytosis was examined. The thrombopoietic activity in serum of experimental animals was tested for its ability to stimulate the incorporation of 75-Se-selonemethionine into platelets of thrombocythaemic mice. The ***administration*** of low doses (0.1--0.5 mg/kg body wt.) of vinblastine to rabbits caused a significant increase in serum thrombopoietic activity. Higher doses of vinblastine (1--5 mg/kg body wt.) also increased the serum thrombopoietic activity, but this increase was preceded by a transient drop in the platelet count of peripheral blood. This thrombocytopenia could have been a stimulus for an increase in thrombopoietic activity, through a compensatory feedback mechanism. The vinblastine-induced increase in thrombopoietic activity was abolished by bilateral nephrectomy but not by bilateral ureteral ligation. These data suggest that kidney tissue may be a major source of the serum thrombopoietic factors.

L2 ANSWER 278 OF 299 MEDLINE
AN 77262551 MEDLINE
TI Incorporation of H3-leucine in the mouse kidney in thrombocytopenia. Attempt to demonstrate ***thrombopoietin*** production.
AU Krizsa F; Cserhati I; Halasz N; Joo F
SO ACTA HAEMATOLOGICA, (1977) 58 (3) 134-7.
Journal code: 0S8. ISSN: 0001-5792.
CY Switzerland

DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7712
AB Light and dark field autoradiography of semithin sections prepared 6 h after a ***treatment*** with APS showed that the incorporation of H3-leucine into the cells of the convoluted tubules of the kidney was increased in mice. There was no difference in the H3-leucine incorporation in the liver, either in thrombocytopenic or in untreated animals. The increased incorporation of leucine in the kidney in APS-induced thrombocytopenia showed coincidence with increased ***thrombopoietin*** production.

L2 ANSWER 279 OF 299 MEDLINE
AN 77246253 MEDLINE
TI Hematologic changes and ***thrombopoietin*** production in mice after X-irradiation and platelet-specific antisera.
AU McDonald T P; Cottrell M; Clift R
SO EXPERIMENTAL HEMATOLOGY, (1977) 5 (4) 291-8.
Journal code: EPR. ISSN: 0301-472X.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7712

AB Sera or plasma ***thrombopoietin*** (TSF) levels of mice were determined after: (a) no ***treatment*** ; (b) induction of thrombocytopenia by injection of rabbit anti-mouse platelet serum (RAMPS); (c) exposure to 750 R or 900 R whole-body x-irradiation; or (d) irradiation and injection with RAMPS. Levels of TSF were assayed in thrombocythemic mice, using Na235SO4 uptake. RAMPS produced an immediate, severe thrombocytopenia without altering RBC or WBC counts of mice. Plasma collected from mice 4 hours after RAMPS injection increased both 35S incorporation into platelets (170% of control, P less than 0.005) and platelet counts (P less than 0.025) of TSF-assay mice. Although severe thrombocytopenia persisted, plasma TSF levels decreased thereafter, i.e., 111% of control after 8 hours and 99% of control after 16 hours. Platelet counts in mice exposed to 750 R and 900 R x-rays progressively decreased to severe thrombocytopenia by day 7, but almost normal RBC counts were maintained. Sera or plasma from animals with x-ray-induced thrombocytopenia caused significant increases in 35S incorporation into platelets of TSF-assay mice (196% of control, P less than 0.005 after 750 R and 141% of control, P less than 0.025 after 900 R). A combination of x-irradiation and RAMPS-injection did not produce greater TSF levels in mice than did x-ray or RAMPS ***treatment*** alone.

L2 ANSWER 280 OF 299 MEDLINE
AN 77236604 MEDLINE
TI Demonstration of ***thrombopoietin*** production after plasma infusion in a patient with congenital ***thrombopoietin*** deficiency [letter].
AU McDonald T P; Green D
SO THROMBOSIS AND HAEMOSTASIS, (1977 Jun 30) 37 (3) 577-9.
Journal code: VQ7.
CY GERMANY, WEST: Germany, Federal Republic of
DT Letter
LA English
FS Priority Journals
EM 7711

L2 ANSWER 281 OF 299 MEDLINE
AN 77173103 MEDLINE
TI Effects of different routes of ***administration*** and injection schedules of ***thrombopoietin*** on 35s incorporation into platelets of assay mice.
AU McDonald T P
SO PROCEEDINGS OF THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE,
(1977 May) 155 (1) 4-7.
Journal code: PXZ. ISSN: 0037-9727.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7708

L2 ANSWER 282 OF 299 MEDLINE
AN 77115299 MEDLINE
TI ***Treatment*** of chronic salmonella carriers. Study with 40 cases of S. typhi, 19 cases of S. paratyphi b and 28 cases of S. enteritidis strains.
AU Freerksen E; Rosenfeld M; Freerksen R; Kruger-Thiemer M
SO CHEMOTHERAPY, (1977) 23 (3) 192-210.
Journal code: D15. ISSN: 0009-3157.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7706
AB The present stage of our studies suggests that, provided a highly effective combined ***therapy*** is, and can be, carried out correctly, all excreters can be cured of their chronic carrier state by chemotherapy within 8-12 weeks. Although we cannot recommend a universal therapeutic regimen for all patients, a highly effective 'basic ***therapy*** ' (RMP+ ***TSP***) is available for the majority of the cases, needing occasional modification, depending on the specific requirements of the individual patient as shown by the result of the serum activity determination. This method saves the patient from toxic inconveniences caused by inadequate ***treatment*** , it shortens the ***treatment*** time and makes cholecystectomy superfluous - unless it is considered necessary out of a different indication in which case it should certainly be done. We cannot share the often expressed view that Salmonella enteritidis excreters cannot be cured, a view which is found even in the most recent manuals. The same applies to the view that ***therapy*** is not necessary because it would delay cure. It is indispensable to establish a close cooperation between the public health authorities and the private physician, and we therefore wish to sincerely thank all colleagues and Public Health Officers for their collaboration.

L2 ANSWER 283 OF 299 MEDLINE
AN 77022001 MEDLINE
TI A comparison of platelet size, latelet count, and platelet 35S incorporation as assays for ***thrombopoietin*** .
AU McDonald T P
SO BRITISH JOURNAL OF HAEMATOLOGY, (1976 Oct) 34 (2) 257-67.
Journal code: AXC. ISSN: 0007-1048.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7702
AB Average platelet size, platelet count, and 35S-incorporation into platelets were compared as methods for the measurement of ***thrombopoietin*** -stimulated thrombopoiesis. In mice injected with rabbit anti-mouse platelet serum (RAMPS) average platelet size was shown to be increased as mice were recovering from thrombocytopenia. Also, 35S-measurements on platelets of these mice showed significant increases in cpm/average platelet 2-4 days after RAMPS ***treatment*** . Significant increases in 35S-incorporation into the total circulating mass of platelets were found on days 3-4. In normal mice or mice in rebound-thrombocytosis injected with ***thrombopoietin*** , platelet size remained unchanged, whereas the platelet cound and 35S-incorporation into platelets were shown to be significantly increased. Moreover, a dose-response experiment in mice pretreated with RAMPS showed a slight increase in platelet count as the dose of TSF was increased, but platelet sizes were unaltered. The % 35S-incorporation into platelets showed a significant linear dose-response, i.e. as the dose of ***thrombopoietin*** was increased, as increase in % 35S-incorporation into platelets was observed. These data indicated that of the three indirect measurements of ***thrombopoietin*** , the % 35S-incorporation into mouse platelets was the most sensitive, followed by platelet counting; the least sensitive measurement of thrombopoiesis was change in platelet size.

L2 ANSWER 284 OF 299 MEDLINE
AN 77012376 MEDLINE
TI [Thrombocytopoietic effect induced by repeated ***administration*** of antithrombocyte serum]. Antithrombocyta serum ismetelt adasaval keltett thrombocytopoeticus hatas vizsgalata.
AU Cserhati I
SO ORVOSI HETILAP, (1976 Aug 29) 117 (35) 2103-5.
Journal code: OL8. ISSN: 0030-6002.
CY Hungary
DT Journal; Article; (JOURNAL ARTICLE)
LA Hungarian

EM 7701

L2 ANSWER 285 OF 299 MEDLINE
AN 77000788 MEDLINE
TI Relationships between thrombopoiesis and erythropoiesis: with studies of the effects of preparations of ***thrombopoietin*** and erythropoietin.
AU Evatt B L; Spivak J L; Levin J
SO BLOOD, (1976 Oct) 48 (4) 547-58.
Journal code: A8G. ISSN: 0006-4971.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 7701
AB The effects of ***administration*** of partially purified human urinary erythropoietin and rabbit ***thrombopoietin*** , and of endogenously produced erythropoietin and ***thrombopoietin*** on both red cell and platelet production were examined in mice. Partially purified ***thrombopoietin*** was prepared from rabbit plasma by sequential fractionation with ammonium sulfate precipitation, and DEAE and Sephadex G-100 chromatography. Preparations of ***thrombopoietin*** and partially purified human urinary erythropoietin (NIH No. H-11-TaLSL) were ***administered*** subcutaneously to normal mice, and the rate of incorporation of selenomethionine-75 Se into platelets was measured as an index of thrombopoietic activity of the infused material. Erythropoietin and ***thrombopoietin*** were assayed for erythropoietic activity by measuring the rate of appearance of 59Fe in the red cells of posthypoxic polycythemic mice. Preparations containing ***thrombopoietin*** had barely measurable erythropoietic activity, and 7 units of partially purified erythropoietin had little thrombopoietic activity. When endogenous levels of erythropoietin were increased by hypoxia, platelet production was not enhanced. Similarly, increased levels of ***thrombopoietin*** , induced in response to thrombocytopenia produced by platelet antiserum, did not alter red cell production. These data suggest that physiologically increased levels of ***thrombopoietin*** do not stimulate erythropoiesis, and that physiologically increased levels of erythropoietn do not stimulate thrombopoiesis. However, currently available, partially purified preparations of erythropoietin and ***thrombopoietin*** may be capable of stimulating both platelet and red cell production if used in sufficient quantities.

L2 ANSWER 286 OF 299 MEDLINE
AN 76246018 MEDLINE
TI A comparison of mice in rebound-thrombocytosis with platelet-hypertransfused mice for the assay of ***thrombopoietin*** .
AU McDonald T P; Clift R; Nolan C; Tribby I I
SO SCANDINAVIAN JOURNAL OF HAEMATOLOGY, (1976 May) 16 (5) 326-34.
Journal code: UCV. ISSN: 0036-553X.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7611
AB Rebound-thrombocytosis and platelet hypertransfusions were compared as methods of preparing assay animals for the measurement of ***thrombopoietin*** (TSF). In immunothrombocythaemic mice, the amount of 35S incorporation into the platelet mass after injections of a standard dose of TSF was related to the length of time after rabbit anti-mouse platelet serum (RAMPS) injection. After 2 platelet transfusions, however, there was no decrease in 35S incorporation values of mice with time after injections of control or TSF-containing substances. When platelet counts were made 3 days after the last platelet transfusion, the counts decreased with the number of transfusions. Mice in rebound-thrombocytosis were responsive to TSF as evidenced by higher platelet counts (P less than 0.05) and increased 35S incorporation into platelets (P less than 0.005), whereas mice made thrombocytotic by platelet transfusions were not. Assuming that increased platelet counts induced by the different techniques affect assay mice only by inhibiting blood cell production by haematopoietic cells, these data are consistent with the hypothesis that sensitivity to TSF depends upon the proliferative state of the megakaryocytic precursor population.

L2 ANSWER 287 OF 299 MEDLINE
AN 76237751 MEDLINE
TI Effect of antithyroid agents 6-propyl-2-thiouracil and 1-mehtyl-2-mercaptoimidazole on human thyroid iodine peroxidase.
AU Nagasaka A; Hidaka H
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1976 Jul) 43 (1) 152-8.
Journal code: HRB. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 7611
AB The mechanism of inhibition of human thyroid iodide peroxidase (***TPO***) by 6-propyl-2-thiouracil (PTU) and 1-methyl-2-mercaptoimidazole (MMI) used in the ***therapy*** of hyperthyroid patients was studied in vitro. The inhibition of ***TPO*** by MMI was not restored either by dialysis or by dilution, but the inhibition by PTU was restored by both ***treatments*** . PTU interacted directly with the product of ***TPO*** action (oxidized iodide) in the reaction mixture without significantly affecting ***TPO*** activity. MMI interacted directly with ***TPO*** and inhibited enzyme activity, rather than interacting with the product (oxidized iodide). The inhibition was irreversible with MMI, but reversible with PTU. The concentrations of PTU and MMI producing 50% inhibition of ***TPO*** were 2 x 10-6m and 8 x 10-7m, respectively. 2-Mercaptoimidazole inhibited ***TPO*** reversibly but 1-methylimidazole and imidazole did not. Both the methyl and mercaptoresidues in MMI moiety are thought to be essential to its irreversible inhibition of ***TPO*** . The in vivo effect of MMI and PTU on ***TPO*** activity was also studied. ***TPO*** activities in the thyroid homogenate of rats to which MMI (2 mg per rat) or PTU (10 mg per rat) had been ***administered*** intraperitoneally were determined before and after dialysis against buffer. ***TPO*** activity in the PTU ***treated*** thyroid homogenate was significantly lower than that in the control before dialysis, but the activity was restored to the control value after dialysis. On the contrary, ***TPO*** activity in the MMI ***treated*** thyroid homogenate was significantly lower than that in the control and was not affected by dialysis. These data may explain why MMI is a more potent inhibitor of iodination than PTU and may fit the clinical results observed when hyperthyroid patients are ***treated*** with these agents.

L2 ANSWER 288 OF 299 MEDLINE
AN 76167827 MEDLINE
TI Thyroid iodine organification defects: a case with lack of thyroglobulin iodination and a case without any peroxidase activity.
AU Pommier J; Tourniaire J; Rahmoun B; Deme D; Pallo D; Bornet H; Nunez J
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1976 Feb) 42 (2) 319-29.
Journal code: HRB. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 7608
AB Two patients (G2, G3) with iodine organification defect were studied. The first patient (G2), a 25-year-old women with no clinical hypothyroidism, had had her goiter for 10 years; 62% of the thyroidal iodine was released by perchlorate indicating iodine organification defect. The thyroid tissue obtained at thyroidectomy contained a normal concentration of thyroid peroxidase (I2 formation from I-) when tested after solubilization of the enzyme by trypsin and digitonin ***treatment*** of the particulate material. 1. The enzymatic activity (G2- ***TPO***) behaved on DEAE cellulose chromatography very differently from those of hog (P- ***TPO***) or another human goiter peroxidase (G1- ***TPO***) (Pommier, et al., J Clin Endocrinol Metab 39: 69, 1974): the molarity of elution was 2M NaCl instead of 0.15 mM. 2. Both P- ***TPO*** and G2- ***TPO*** catalyzed iodide peroxidation (I- leads to I2) but the Km (Iodide) value for G2- ***TPO*** was much lower (2.3 x 10(-2) M) when compared with that of P- ***TPO*** (3.7 x 10(-3) M) or G1- ***TPO*** (3.5 x 10(-3) M). In addition, the optimum pH for this reaction differed markedly (pH 6.1 instead of 7.9). 3. G2- ***TPO*** was poorly efficient in catalyzing the oxidation of gaiacol to tetragaiacol. 4. G2- ***TPO*** was unable to perform the iodination of non-iodinated goiter thyroglobulin whatever the pH

and the iodide concentration. 5. Thyroglobulin from this goiter (G2) was almost not iodinated (0.0014%), i.e., 0.07 atoms iodine/mole thyroglobulin), and its total content in the gland was very low (0.3-4 g/1000 g wet tissue instead of 25 g). A clear discrepancy was thus shown between the euthyroid state of this patient and the total lack of iodinating activity of the isolated peroxidase. The second patient (G3), a 17-year-old man with clinical hypothyroidism, had had his goiter for 5 years. 100% of the thyroidal iodine was released by perchlorate indicating a complete iodine organification defect. The thyroid tissue obtained at thyroidectomy contained no peroxidase activity when tested before and after ***treatment*** of the particulate material by trypsin and digitonin and even in the presence of hematin. Thyroglobulin from this goiter, which was almost non-iodinated (0.0014%), was present in normal amounts in the gland (congruent to 25 g/1000 g).

L2 ANSWER 289 OF 299 MEDLINE
AN 75219641 MEDLINE
TI Protective effect of pantethine on experimental thrombocytopenia in the rat.
AU Ashida S I; Abiko Y
SO THROMBOSIS ET DIATHESIS HAEMORRHAGICA, (1975 Jun 30) 33 (3) 528-39.
Journal code: VRM. ISSN: 0040-6597.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7512

AB The effects of pantethine on circulating platelet counts and platelet functions were studied in normal and experimentally produced thrombocytopenic rats. ***Administration*** of pantethine to normal animals did not cause any alterations in both platelet count and function except for a slight enhancement of intravascular platelet aggregation induced by collagen or neuramindase. Injection of anti-rat platelet rabbit serum into rats resulted in acute thrombocytopenia. ***Administration*** of pantethine prior to the antiserum promoted recovery from the thrombocytopenia in a dose dependent manner, but ***administration*** of the drug after development of the thrombocytopenia was not effective. A similar result was obtained with a transietnt thrombocytopenia induced by exchange transfusion with platelet poor blood. Regardless of whether animals were ***treated*** with pantethine or not, the platelets newly generated during the course of recovery from thrombocytopenia were essentially normal in the function tested in vitro. A more chronic thrombocytopenia induced by repeated injections of the antiserum was prevented, to some significant degree, by daily ***administration*** of pantethine throughout the experimental period. In contrast to these, such effect of pantethine was not observed with the thrombocytopenia models produced bynitrogen mustard N-oxide and neuraminidase. These findings were idscussed in relation to mechanism of the action of pantethine and to possible clinical application to the drug to thrombocytopenia.

L2 ANSWER 290 OF 299 MEDLINE
AN 74149369 MEDLINE
TI Control of platelet production.
AU Harker L A
SO ANNUAL REVIEW OF MEDICINE, (1974) 25 383-400. Ref: 89
Journal code: 6DR. ISSN: 0066-4219.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals
EM 7408

L2 ANSWER 291 OF 299 MEDLINE
AN 74041163 MEDLINE
TI Study of the effect of actinomycin D on the thrombocytopoiesis of mice, using 75Se-labelled methionine.
AU Cserhati I; Toth S
SO ACTA HAEMATOLOGICA, (1973) 50 (3) 168-73.
Journal code: 0S8.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 7403

L2 ANSWER 292 OF 299 MEDLINE
AN 69157097 MEDLINE
TI [Blood platelets of mammals].
Les plaquetts sanguines des mammif eres.
AU Maupin B
SO BIOLOGIE MEDICALE, (1967 Mar-Apr) 65 (2) 143-91. Ref: 150
Journal code: BB0. ISSN: 0006-3266.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA French
EM 6907

L2 ANSWER 293 OF 299 MEDLINE
AN 69084440 MEDLINE
TI Application of a proteolytic enzyme ***TSP*** to oral surgery.
AU Nagao Y; Sasaki J; Okuyama T; Goto J; Osone Y
SO SHIKWA GAKUHO, (1968 Aug) 68 (8) 74-8.
Journal code: UP4. ISSN: 0037-3710.
CY Japan
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA Japanese
FS Dental Journals; Dental
EM 6904

L2 ANSWER 294 OF 299 MEDLINE
AN 69001984 MEDLINE
TI [Thrombopoiesis stimulating factors from tissue extracts?].
Thrombopoesetimulierence Faktoren aus Gewebeextrakten?.
AU Gehrmann G
SO DEUTSCHE MEDIZINISCHE WOCHENSCHRIFT, (1968 Oct 4) 93 (40) 1925.
Journal code: ECL. ISSN: 0012-0472.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 6901

L2 ANSWER 295 OF 299 MEDLINE
AN 68400849 MEDLINE
TI [***Thrombopoietin*** . Experimental bases and hemotherapeutic studies].
Thrombopoetin Experimentelle Grundlagen und hamotherapeutische Versuche.
AU De Nicola P; Gibelli A
SO BIBLIOTHECA HAEMATOLOGICA, (1967) 27 263-7.
Journal code: 9SW. ISSN: 0067-7957.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 6812

L2 ANSWER 296 OF 299 MEDLINE
AN 68362426 MEDLINE
TI [Thioridazine and its metabolites TPD-6 and ***TPO*** -33 Sandoz in the ***treatment*** of depressive states].
Tiorydazyna i jej metabolity TPD-6 i ***TPO*** -33 Sandoz w leczeniu stanow depresyjnych.
AU Bilikiewicz A; Dolmierski R; Sikorski W
SO PSYCHIATRIA POLSKA, (1967 Jul-Aug) 1 (4) 447-53.
Journal code: QBJ. ISSN: 0033-2674.
CY Poland
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA Polish
EM 6811

L2 ANSWER 297 OF 299 MEDLINE
AN 68359682 MEDLINE
TI Effect of combination ***therapy*** with ***TSP*** tablet and antibiotics for acute cystitis.
AU Sadanobu K; Shoji T; Nishimura Y; Miyazaki S
SO HINYOKIKA KIYO. ACTA UROLOGICA JAPONICA, (1967 Nov) 13 (11) 853-7.
Journal code: 27K. ISSN: 0001-7191.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)

LA Japanese
EM 6811

L2 ANSWER 298 OF 299 MEDLINE
AN 68081317 MEDLINE
TI Anti-inflammatory action of a protease, ***TSP*** , produced by Serratia.
AU Yamasaki H; Tsuji H; Saeki K
SO NIPPON YAKURIGAKU ZASSHI. FOLIA PHARMACOLOGICA JAPONICA, (1967 Jul 20) 63 (4) 302-14.
Journal code: F2X. ISSN: 0015-5691.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA Japanese
FS Priority Journals
EM 6803

L2 ANSWER 299 OF 299 MEDLINE
AN 66046648 MEDLINE
TI ***TPO*** -33: a pilot trial in chronic schizophrenic patients.
AU Gallant D M; Bishop M P; Steele C
SO CURRENT THERAPEUTIC RESEARCH, CLINICAL AND EXPERIMENTAL, (1965 Dec) 7 (12) 783-4.
Journal code: DWK. ISSN: 0011-393X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 6604

=> d l2 100-200

L2 ANSWER 100 OF 299 MEDLINE
AN 93179438 MEDLINE
TI Corticotropin-induced secreted protein, an ACTH-induced protein secreted by adrenocortical cells, is structurally related to thrombospondins.
AU Pellerin S; Lafeuillade B; Scherrer N; Gagnon J; Shi D L; Chambaz E M; Feige J J
CS Institut National de la Sante et de la REcherche Medicale Unite 244, Departement de Biologie Moleculaire et Structurale, Grenoble, France..
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1993 Feb 25) 268 (6) 4304-10.
Journal code: HIV. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9306

L2 ANSWER 101 OF 299 MEDLINE
AN 93175140 MEDLINE
TI [Disorders of thyroid function and sterility in the woman]. Schilddrusenfunktionsstorungen und Sterilitat der Frau.
AU Bals-Pratsch M; Schober O; Hanker J P; de Geyter C; Schneider H P
CS Klinik und Poliklinik fur Geburtshilfe und Frauenheilkunde, Universitat Munster..
SO ZENTRALBLATT FUR GYNAKOLOGIE, (1993) 115 (1) 18-23.
Journal code: Y5S. ISSN: 0044-4197.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 9305

L2 ANSWER 102 OF 299 MEDLINE
AN 93163269 MEDLINE
TI Comparison of four decontamination methods for recovery of Mycobacterium avium complex from stools.
AU Yajko D M; Nassos P S; Sanders C A; Gonzalez P C; Reingold A L; Horsburgh C R Jr; Hopewell P C; Chin D P; Hadley W K
CS Department of Laboratory Medicine, San Francisco General Hospital, University of California 94110..
SO JOURNAL OF CLINICAL MICROBIOLOGY, (1993 Feb) 31 (2) 302-6.
Journal code: HSH. ISSN: 0095-1137.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9305

L2 ANSWER 103 OF 299 MEDLINE
AN 93155111 MEDLINE
TI High level thrombospondin 1 expression in two NIH 3T3 cloned lines confers serum- and anchorage-independent growth.
AU Castle V P; Ou X; O'Rourke K; Dixit V M
CS Department of Pediatrics, University of Michigan School of Medicine, Ann Arbor 48109..
NC CAO 1599-01 (NCI)
CA 58182
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1993 Feb 5) 268 (4) 2899-903.
Journal code: HIV. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9305

L2 ANSWER 104 OF 299 MEDLINE
AN 93154361 MEDLINE
TI Cell-associated proteoheparan sulfate mediates binding and uptake of thrombospondin in cultured porcine vascular endothelial cells.
AU Schon P; Vischer P; Volker W; Schmidt A; Faber V
CS Institut fur Arterioskleroseforschung, Universitat Munster/ Deutschland..
SO EUROPEAN JOURNAL OF CELL BIOLOGY, (1992 Dec) 59 (2) 329-39.
Journal code: EM7. ISSN: 0171-9335.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9305

L2 ANSWER 105 OF 299 MEDLINE
AN 93146795 MEDLINE
TI Fibrin induction of thrombospondin in corneal endothelial cells in vitro.
AU Ramsby M L; Kreutzer D L
CS Department of Pathology, University of Connecticut Health Center, Farmington 06030..
NC EY04131 (NEI)
HL25015 (NHLBI)
SO INVESTIGATIVE OPHTHALMOLOGY AND VISUAL SCIENCE, (1993 Jan) 34 (1) 165-74.
Journal code: GWI. ISSN: 0146-0404.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9305

L2 ANSWER 106 OF 299 MEDLINE
AN 93130651 MEDLINE
TI Tear protein G originates from denatured tear specific prealbumin as revealed by two-dimensional electrophoresis.
AU Baguet J; Claudon-Eyl V; Gachon A M
CS Laboratoire Meuse Optique Contact (MOC), Centre Hospitalier, Bar le Duc, France..
SO CURRENT EYE RESEARCH, (1992 Nov) 11 (11) 1057-65.
Journal code: DUB. ISSN: 0271-3683.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9304

L2 ANSWER 107 OF 299 MEDLINE
AN 93125658 MEDLINE
TI Feeding differently processed soya bean. Part 3. Effect on serum constituents and bone mineralization in the chicken.
AU Aletor V A; Osungwu C I
CS International Center for Agricultural Research in the Dry Areas, Aleppo, Syria..
SO NAHRUNG, (1992) 36 (5) 438-42.
Journal code: NQD. ISSN: 0027-769X.
CY GERMANY: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9304

L2 ANSWER 108 OF 299 MEDLINE
AN 93119826 MEDLINE
TI Effect of human thyroglobulin on the production of platelet activating factor from peripheral blood mononuclear cells from patients with autoimmune thyroid diseases.
AU Resetkova E; Morita T; Akasu F; Carayon P; Volpe R
CS Endocrinology Research Laboratory, Wellesley Hospital, University of Toronto, Ontario, Canada..
SO REGIONAL IMMUNOLOGY, (1992 Jul-Aug) 4 (4) 204-8.
Journal code: AVT. ISSN: 0896-0623.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9304

L2 ANSWER 109 OF 299 MEDLINE
AN 93103626 MEDLINE
TI Progressive spastic myelopathy in a patient co-infected with HIV-1 and HTLV-II: autoantibodies to the human homologue of rig in blood and cerebrospinal fluid.
AU Rosenblatt J D; Tomkins P; Rosenthal M; Kacena A; Chan G; Valderama R; Harrington W Jr; Saxton E; Diagne A; Zhao J Q; et al
CS Department of Medicine, UCLA School of Medicine..
NC CA04718 (NCI)
SO AIDS, (1992 Oct) 6 (10) 1151-8.
Journal code: AID. ISSN: 0269-9370.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9303

L2 ANSWER 110 OF 299 MEDLINE
AN 93081774 MEDLINE
TI In vivo effects of interleukin-6 on thrombopoiesis in healthy and irradiated primates [see comments].
CM Comment in: Blood 1993 May 15;81(10):2819-20
AU Zeidler C; Kanz L; Hurkuck F; Rittmann K L; Wildfang I; Kadoya T; Mikayama T; Souza L; Welte K
CS Department of Pediatric Hematology and Oncology, Medical School Hannover, Germany..
SO BLOOD, (1992 Dec 1) 80 (11) 2740-5.
Journal code: A8G. ISSN: 0006-4971.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9303

L2 ANSWER 111 OF 299 MEDLINE
AN 93073325 MEDLINE
TI Chronic myelopathy associated with human T-lymphotropic virus type I (HTLV-I).
AU Gessain A; Gout O
CS Laboratory of Tumor Cell Biology, National Cancer Institute, National Institues of Health, Bethesda, MD 20892..
SO ANNALS OF INTERNAL MEDICINE, (1992 Dec 1) 117 (11) 933-46. Ref: 255
Journal code: 5A6. ISSN: 0003-4819.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, MULTICASE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9302

L2 ANSWER 112 OF 299 MEDLINE
AN 93057070 MEDLINE
TI Monocyte diapedesis through an in vitro vessel wall construct: inhibition with monoclonal antibodies to thrombospondin.
AU Huber A R; Ellis S; Johnson K J; Dixit V M; Varani J
CS Department of Internal Medicine, Emory University School of Medicine, Atlanta, Georgia..
SO JOURNAL OF LEUKOCYTE BIOLOGY, (1992 Nov) 52 (5) 524-8.
Journal code: IWY. ISSN: 0741-5400.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9302

L2 ANSWER 113 OF 299 MEDLINE
AN 93055422 MEDLINE
TI Induction of thrombospondin 1 by retinoic acid is important during differentiation of neuroblastoma cells.
AU Castle V P; Ou X; O'Shea S; Dixit V M
CS Department of Pediatrics, University of Michigan Medical School, Ann Arbor 48109..
NC CA-01599-01 (NCI)
HD-23867 (NICHD)
SO JOURNAL OF CLINICAL INVESTIGATION, (1992 Nov) 90 (5) 1857-63.
Journal code: HS7. ISSN: 0021-9738.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9302

L2 ANSWER 114 OF 299 MEDLINE
AN 93029244 MEDLINE
TI ***Thrombopoietin*** from human embryonic kidney cells causes increased thrombocytopoiesis in sublethally irradiated mice.
AU Carter C D; McDonald T P
CS Department of Animal Science, College of Veterinary Medicine, University of Tennessee, Knoxville 37901..
NC HL14637 (NHLBI)
SO RADIATION RESEARCH, (1992 Oct) 132 (1) 74-81.
Journal code: QMP. ISSN: 0033-7587.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9301

L2 ANSWER 115 OF 299 MEDLINE
AN 93027204 MEDLINE
TI Photooxidation of d(TpG) by phthalocyanines and riboflavin. Isolation and characterization of dinucleoside monophosphates containing the 4R* and 4S* diastereoisomers of 4,8-dihydro-4-hydroxy-8-oxo-2'-deoxy-guanosine.
AU Buchko G W; Cadet J; Berger M; Ravanat J L
CS Laboratoire des Lesions des Acides Nucleiques, DRFMC/SESAM, Centre d'Etudes Nucleaires de Grenoble, France..
SO NUCLEIC ACIDS RESEARCH, (1992 Sep 25) 20 (18) 4847-51.
Journal code: O8L. ISSN: 0305-1048.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9301

L2 ANSWER 116 OF 299 MEDLINE
AN 93016884 MEDLINE
TI Thrombospondin cooperates with CD36 and the vitronectin receptor in macrophage recognition of neutrophils undergoing apoptosis.
AU Savill J; Hogg N; Ren Y; Haslett C
CS Department of Medicine, Royal Postgraduate Medical School, Hammersmith Hospital, London, United Kingdom..
SO JOURNAL OF CLINICAL INVESTIGATION, (1992 Oct) 90 (4) 1513-22.
Journal code: HS7. ISSN: 0021-9738.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9301

L2 ANSWER 117 OF 299 MEDLINE
AN 93016846 MEDLINE
TI Identification of a mutation in the coding sequence of the human thyroid peroxidase gene causing congenital goiter.
AU Abramowicz M J; Targovnik H M; Varela V; Cochaux P; Krawiec L; Pisarev M A; Propato F V; Juvenal G; Chester H A; Vassart G
CS Institut de Recherche Interdisciplinaire en Biologie Humaine et Nucleaire, Free University of Brussels, Belgium..
SO JOURNAL OF CLINICAL INVESTIGATION, (1992 Oct) 90 (4) 1200-4.

Journal code: HS7. ISSN: 0021-9738.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
OS GENBANK-S46243; GENBANK-S46244; GENBANK-S85453; GENBANK-S85454;
GENBANK-S85455; GENBANK-S85456; GENBANK-S85457; GENBANK-S85458;
GENBANK-S85460; GENBANK-S85461
EM 9301

L2 ANSWER 118 OF 299 MEDLINE
AN 93004243 MEDLINE
TI Analysis of carbohydrate residues on human thyroid peroxidase (***TPO***) and thyroglobulin (Tg) and effects of deglycosylation, reduction and unfolding on autoantibody binding.
AU Kiso Y; Furmaniak J; Morteo C; Smith B R
CS Endocrine Immunology Unit, University of Wales College of Medicine, Heath Park, Cardiff..
SO AUTOIMMUNITY, (1992) 12 (4) 259-69.
Journal code: A5H. ISSN: 0891-6934.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9301

L2 ANSWER 119 OF 299 MEDLINE
AN 92410089 MEDLINE
TI [Growth factors and hematopoiesis. Physiopathology and clinical applications].
I fattori di crescita e l'emopoiesi. Fisiopatologia ed applicazioni cliniche.
AU Buemi M; Allegra A; Frisina N
CS Dipartimento di Medicina Interna, Universit`a, Messina..
SO RECENTI PROGRESSI IN MEDICINA, (1992 Jul-Aug) 83 (7-8) 460-9.
Ref:
86
Journal code: R1T. ISSN: 0034-1193.
CY Italy
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA Italian
EM 9212

L2 ANSWER 120 OF 299 MEDLINE
AN 92380507 MEDLINE
TI Insulin increases transcription of rat gene 33 through cis-acting elements in 5'-flanking DNA.
AU Cadilla C; Isham K R; Lee K L; Ch'ang L Y; Johnson A C; Kenney F T
CS University of Tennessee-Oak Ridge Graduate School of Biomedical Sciences..
NC T32 CA 09336 (NCI)
SO GENE, (1992 Sep 10) 118 (2) 223-9.
Journal code: FOP..ISSN: 0378-1119.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9212

L2 ANSWER 121 OF 299 MEDLINE
AN 92366160 MEDLINE
TI Activation of interleukin-2 receptor alpha expression by extracellular HTLV-I Tax1 protein: a potential role in HTLV-I pathogenesis.
AU Marriott S J; Trinh D; Brady J N
CS Division of Molecular Virology, Baylor College of Medicine, Houston, Texas 77030..
SO ONCOGENE, (1992 Sep) 7 (9) 1749-55.
Journal code: ONC. ISSN: 0950-9232.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9211

L2 ANSWER 122 OF 299 MEDLINE
AN 92348511 MEDLINE
TI Disulfides modulate RGD-inhibitable cell adhesive activity of thrombospondin.
AU Sun X; Skorstengaard K; Mosher D F
CS Department of Medicine, University of Wisconsin, Madison 53706..
NC HL 29586 (NHLBI)
SO JOURNAL OF CELL BIOLOGY, (1992 Aug) 118 (3) 693-701.
Journal code: HMV. ISSN: 0021-9525.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9211

L2 ANSWER 123 OF 299 MEDLINE
AN 92345402 MEDLINE
TI Determination of the metabolites of terfenadine in human urine by thermospray liquid chromatography-mass spectrometry.
AU Chen T M; Chan K Y; Coutant J E; Okerholm R A
CS Marion Merrell Dow Research Institute, Cincinnati, OH 45215-6300..
SO JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, (1991) 9 (10-12)
929-33.
Journal code: A2C. ISSN: 0731-7085.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9211

L2 ANSWER 124 OF 299 MEDLINE
AN 92340641 MEDLINE
TI A new electron microscope positive staining method for viruses in suspension.
AU Doultree J C; Kleman R E; Lee J Y; Bowden D S; McPhee D A; Tokuyasu K T; Marshall J A
CS Virology Department, Fairfield Hospital, Victoria, Australia..
SO JOURNAL OF VIROLOGICAL METHODS, (1992 Jun) 37 (3) 321-35.
Journal code: HQR. ISSN: 0166-0934.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9210

L2 ANSWER 125 OF 299 MEDLINE
AN 92329926 MEDLINE
TI Evidence that interleukin-6 does not play a role in the stimulation of platelet production after induction of acute thrombocytopenia.
AU Hill R J; Warren M K; Levin J; Gauldie J
CS Department of Laboratory Medicine, University of California School of Medicine, San Francisco..
SO BLOOD, (1992 Jul 15) 80 (2) 346-51.
Journal code: A8G. ISSN: 0006-4971.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9210

L2 ANSWER 126 OF 299 MEDLINE
AN 92298405 MEDLINE
TI Identification of fibronectin in chicken thrombocytes.
AU Horiuchi H; Hayashi M; Matsuda H; Murata M
CS Department of Microbiology and Hygiene, Faculty of Applied Biological Science, Hiroshima University, Japan..
SO CELL STRUCTURE AND FUNCTION, (1992 Apr) 17 (2) 93-8.
Journal code: CSF. ISSN: 0386-7196.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9209

L2 ANSWER 127 OF 299 MEDLINE
AN 92291195 MEDLINE
TI Characterisation of metabolites of 3-ethyl-3-(4-pyridyl)-piperidine-2,6-dione, a potential breast cancer drug.
AU Poon G K; McCague R; Griggs L J; Jarman M; Lewis I A
CS Drug Development Section, Institute of Cancer Research, Sutton, Surrey, UK..
NC DK 34400 (NIDDK)

RR 03300 (NCRR)
SO JOURNAL OF CHROMATOGRAPHY, (1991 Dec 6) 572 (1-2) 143-57.
Journal code: HQF. ISSN: 0021-9673.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9209

L2 ANSWER 128 OF 299 MEDLINE
AN 92262351 MEDLINE
TI [Hematopoietic growth factors].
Krwiotworcze czynniki wzrostowe.
AU Robak T
CS Pracownia Farmakologii Klinicznej Akademii Medycznej, Lodzi..
SO POSTEPY HIGIENY I MEDYCYNY DOSWIADCZALNEJ, (1991) 45 (6) 461-96.
Ref: 164
Journal code: PEU. ISSN: 0032-5449.
CY Poland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA Polish
EM 9208

L2 ANSWER 129 OF 299 MEDLINE
AN 92256044 MEDLINE
TI Tropical spastic paraparesis/HTLV-1-associated myelopathy (***TSP*** /HAM): ***treatment*** with an anabolic steroid danazol.
AU Harrington W J Jr; Sheremata W A; Snodgrass S R; Emerson S; Phillips S; Berger J R
CS William J. Harrington Center for Blood Diseases, Department of Medicine, University of Miami, FL 33136..
NC 89-A1-20
SO AIDS RESEARCH AND HUMAN RETROVIRUSES, (1991 Dec) 7 (12) 1031-4.
Journal code: ART. ISSN: 0889-2229.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9208

L2 ANSWER 130 OF 299 MEDLINE
AN 92241150 MEDLINE
TI Differentiation-controlled synthesis and binding of thrombospondin to granulosa cells.
AU Dreyfus M; Dardik R; Suh B S; Amsterdam A; Lahav J
CS Department of Polymer Research, Weizmann Institute of Science, Rehovot, Israel..
SO ENDOCRINOLOGY, (1992 May) 130 (5) 2565-70.
Journal code: EGZ. ISSN: 0013-7227.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9208

L2 ANSWER 131 OF 299 MEDLINE
AN 92197831 MEDLINE
TI ***Thrombopoietin*** . Its biology, clinical aspects, and possibilities.
AU McDonald T P
CS Department of Animal Science, College of Veterinary Medicine, University of Tennessee, Knoxville 37901-1071..
NC HL 14637 (NHLBI)
SO AMERICAN JOURNAL OF PEDIATRIC HEMATOLOGY/ONCOLOGY, (1992 Spring) 14
(1) 8-21. Ref: 164
Journal code: 35P. ISSN: 0192-8562.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LA English
FS Priority Journals
EM 9206

L2 ANSWER 132 OF 299 MEDLINE
AN 92147642 MEDLINE
TI In vitro and in vivo regulation of thyrotropin receptor mRNA levels in dog and human thyroid cells.
AU Maenhaut C; Brabant G; Vassart G; Dumont J E
CS Institut de Recherche Interdisciplinaire, Universite Libre de Bruxelles, Belgium..
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1992 Feb 15) 267 (5) 3000-7.
Journal code: HIV. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9205

L2 ANSWER 133 OF 299 MEDLINE
AN 92139102 MEDLINE
TI Leukoencephalopathy in HTLV-I-associated myelopathy/tropical spastic paraparesis: MRI analysis and a two year follow-up study after corticosteroid ***therapy*** .
AU Kira J; Fujihara K; Itoyama Y; Goto I; Hasuo K
CS Department of Neurology, Faculty of Medicine, Kyushu University, Fukuoka, Japan..
SO JOURNAL OF THE NEUROLOGICAL SCIENCES, (1991 Nov) 106 (1) 41-9.
Journal code: JBJ. ISSN: 0022-510X.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9205

L2 ANSWER 134 OF 299 MEDLINE
AN 92134764 MEDLINE
TI The potential inhalation hazard posed by dioxin contaminated soil.
AU Paustenbach D J; Sarlos T T; Lau V; Finley B L; Jeffrey D A; Ungs M J
CS ChemRisk, Alameda, California..
SO JOURNAL OF THE AIR AND WASTE MANAGEMENT ASSOCIATION, (1991 Oct) 41
(10) 1334-40.
Journal code: AMH. ISSN: 1047-3289.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
EM 9205

L2 ANSWER 135 OF 299 MEDLINE
AN 92126826 MEDLINE
TI The microsomal/peroxidase antigen: modulation of its expression in thyroid cells.
AU Chiovato L; Pinchera A
CS Istituto di Endocrinologia, University of Pisa, Tirrenia, Italy..
SO AUTOIMMUNITY, (1991) 10 (4) 319-31. Ref: 131
Journal code: A5H. ISSN: 0891-6934.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LA English
FS Priority Journals
EM 9205

L2 ANSWER 136 OF 299 MEDLINE
AN 92112958 MEDLINE
TI Biological activities of peptides and peptide analogues derived from common sequences present in thrombospondin, properdin, and malarial proteins.
AU Tuszynski G P; Rothman V L; Deutch A H; Hamilton B K; Eyal J
CS Department of Medicine, Medical College of Pennsylvania, Philadelphia 19129..
NC HL28149 (NHLBI)
SO JOURNAL OF CELL BIOLOGY, (1992 Jan) 116 (1) 209-17.
Journal code: HMV. ISSN: 0021-9525.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9204

L2 ANSWER 137 OF 299 MEDLINE

AN 92089024 MEDLINE
TI Soluble HTLV-I Tax1 protein stimulates proliferation of human peripheral blood lymphocytes.
AU Marriott S J; Lindholm P F; Reid R L; Brady J N
CS Laboratory of Molecular Virology, National Cancer Institute, Bethesda, MD 20892..
SO NEW BIOLOGIST, (1991 Jul) 3 (7) 678-86.
Journal code: AZH. ISSN: 1043-4674.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9204

L2 ANSWER 138 OF 299 MEDLINE
AN 92081750 MEDLINE
TI Platelet thrombospondin and glycoprotein IV abnormalities in patients with essential thrombocythemia: effect of alpha-interferon ***treatment*** .
AU Legrand C; Bellucci S; Disdier M; Edelman L; Tobelem G
CS INSERM U 150/Laboratoire Association Claude Bernard et Departement d'Angiohematologie, IVS, Hopital Lariboisi`ere, Paris, France..
SO AMERICAN JOURNAL OF HEMATOLOGY, (1991 Dec) 38 (4) 307-13.
Journal code: 3H4. ISSN: 0361-8609.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9203

L2 ANSWER 139 OF 299 MEDLINE
AN 92076269 MEDLINE
TI [Clinical and biological epidemiology of onco-retroviral HTLV-I and II infections].
Epidemiologie biologique et clinique des infections onco-retrovirales HTLV-I et II.
AU De The G
CS Unite d'epidemiologie des virus oncog`enes, Institut Pasteur, Paris..
SO BULLETIN DE L ACADEMIE NATIONALE DE MEDECINE, (1991 Jun-Jul) 175 (6)
861-9; discussion 869-70.
Journal code: B8G. ISSN: 0001-4079.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
LA French
EM 9203

L2 ANSWER 140 OF 299 MEDLINE
AN 92008309 MEDLINE
TI Thyroid-specific antigens in Basedow's disease.
AU Rapoport B
CS Thyroid Molecular Biology Unit, University of California, San Francisco..
SO EXPERIMENTAL AND CLINICAL ENDOCRINOLOGY, (1991 May) 97 (2-3) 147-52.
Ref: 20
Journal code: EPA. ISSN: 0232-7384.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 9201

L2 ANSWER 141 OF 299 MEDLINE
AN 92007544 MEDLINE
TI In vivo effect of thyrotropin on intracellular translocation of thyroid peroxidase in rat thyroid cells by an indirect immunofluorescence method.
AU Watanabe K; Nakamura A; Suzuki N; Futaesaku Y; Hosoya T
CS Faculty of Pharmaceutical Sciences, Chiba University, Japan..
SO ENDOCRINOLOGIA JAPONICA, (1991 Feb) 38 (1) 89-95.
Journal code: EG5. ISSN: 0013-7219.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9201

L2 ANSWER 142 OF 299 MEDLINE
AN 92006178 MEDLINE
TI Comparison of thyroperoxidase and microsomal antibody assays in sera from patients with Graves disease.
AU Massart C; Guilhem I; Gibassier J; Allannic H; Nicol M
CS Laboratoire de Biochimie A, UER Medicales de Rennes, France..
SO CLINICAL CHEMISTRY, (1991 Oct) 37 (10 Pt 1) 1777-80.
Journal code: DBZ. ISSN: 0009-9147.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9201

L2 ANSWER 143 OF 299 MEDLINE
AN 91378349 MEDLINE
TI Reduction of a disulfide bond of thrombospondin in the supernatant solution of activated platelets.
AU Speziale M V; Detwiler T C
CS Department of Biochemistry, State University of New York Health Sciences Center, Brooklyn 11203..
NC HL37250 (NHLBI)
SO ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1991 May 1) 286 (2)
548-50.
Journal code: 6SK. ISSN: 0003-9861.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9112

L2 ANSWER 144 OF 299 MEDLINE
AN 91367868 MEDLINE
TI ***Thrombopoietin*** production in mice ***treated*** with acetylsalicylic acid.
AU Clift R E; Cottrell M B; McDonald T P
CS Department of Animal Science, College of Veterinary Medicine, University of Tennessee, Knoxville 37901-1071..
NC HL 14637 (NHLBI)
SO PROCEEDINGS OF THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE,
(1991 Oct) 198 (1) 656-60.
Journal code: PXZ. ISSN: 0037-9727.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9112

L2 ANSWER 145 OF 299 MEDLINE
AN 91343105 MEDLINE
TI Prevention of an air embolism by moderate hypoventilation during surgery in the sitting position.
AU Zentner J; Albrecht T; Hassler W
CS Department of Neurosurgery, Medical School, University of Tubingen, Germany..
SO NEUROSURGERY, (1991 May) 28 (5) 705-8.
Journal code: NZL. ISSN: 0148-396X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9111

L2 ANSWER 146 OF 299 MEDLINE
AN 91333430 MEDLINE
TI [The effect of 2 thrombocytopoietic-active polypeptides on thrombocytopenia in mice irradiated with ionizing radiation].
Efekti dvaju trombocitopoeticno aktivnih polipeptida na trombocitopeniju miseva ozracenih jonizujucim zracima.
AU Marinkov S; Popov J; Rudic A
CS Institut za biohemiju, Medicinskog fakulteta, Novom Sadu..
SO MEDICINSKI PREGLED, (1991) 44 (1-2) 13-6.
Journal code: M8U. ISSN: 0025-8105.
CY Yugoslavia
DT Journal; Article; (JOURNAL ARTICLE)
LA Serbo-Croatian
EM 9111

L2 ANSWER 147 OF 299 MEDLINE

AN 91302817 MEDLINE
TI Activation of human neutrophils increases thrombospondin receptor expression.
AU Suchard S J; Boxer L A; Dixit V M
CS Department of Pediatrics, University of Michigan School of Medicine, Ann Arbor 48109..
NC A126863 (NHLBI)
A120065
HL31963
SO JOURNAL OF IMMUNOLOGY, (1991 Jul 15) 147 (2) 651-9.
Journal code: IFB. ISSN: 0022-1767.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9110

L2 ANSWER 148 OF 299 MEDLINE
AN 91301204 MEDLINE
TI The effects of interleukin-1 on the expression of thrombospondin and fibronectin by rabbit articular chondrocytes.
AU Lyons-Giordano B; Kefalides N A; Brinker J M; Pratta M A; Arner E C
CS DuPont Merck Pharmaceutical Company, Wilmington, Delaware 19880..
NC AR-20553 (NIAMS)
HL-29492 (NHLBI)
AR-07490 (NIAMS)
SO EXPERIMENTAL CELL RESEARCH, (1991 Aug) 195 (2) 462-7.
Journal code: EPB. ISSN: 0014-4827.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9110

L2 ANSWER 149 OF 299 MEDLINE
AN 91300776 MEDLINE
TI The SCID-hu mouse and thyroid autoimmunity: characterization of human thyroid autoantibody secretion.
AU Davies T F; Kimura H; Fong P; Kendler D; Shultz L D; Thung S; Martin A
CS Department of Medicine, Mount Sinai School of Medicine, New York, New York 10029..
NC DK28242 (NIDDK)
DK35674 (NIDDK)
CA20408 (NCI)
SO CLINICAL IMMUNOLOGY AND IMMUNOPATHOLOGY, (1991 Aug) 60 (2) 319-30.
Journal code: DEA. ISSN: 0090-1229.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals

EM 9110

L2 ANSWER 150 OF 299 MEDLINE
AN 91282747 MEDLINE
TI Thrombospondin-exposed human monocytes display augmented luminol-enhanced chemiluminescence upon receptor triggering.
AU Schuepp B J; Jungi T W
CS Institute of Veterinary Virology, University of Berne, Switzerland..
SO BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1991 Jun 28)
177 (3) 1087-94.
Journal code: 9Y8. ISSN: 0006-291X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9110

L2 ANSWER 151 OF 299 MEDLINE
AN 91278844 MEDLINE
TI [Radioimmunologic determination of growth factors. II. Comparative development of methods for the determination of hematopoietic growth factors].
Radioimunolosko odredivanje faktora rasta. II. Uporedni razvoj metoda za odredivanje hematopoeznih faktora rasta.
AU Borota R; Popov J; Krajnovic J
CS Medicinski fakultet, Institut za patolosku fiziologiju, Novi Sad..
SO MEDICINSKI PREGLED, (1990) 43 (7-8) 317-22.
Journal code: M8U. ISSN: 0025-8105.
CY Yugoslavia
DT Journal; Article; (JOURNAL ARTICLE)
LA Serbo-Croatian
EM 9110

L2 ANSWER 152 OF 299 MEDLINE
AN 91275923 MEDLINE
TI Thrombospondin production and thrombospondin-mediated adhesion in U937 cells.
AU Varani J; Stoolman L; Wang T; Schuger L; Flippen C; Dame M; Johnson K J; Todd R F 3d; Ryan U S; Ward P A
CS Department of Pathology, University of Michigan Medical School, Ann Arbor 48109..
NC CA39064 (NCI)
SO EXPERIMENTAL CELL RESEARCH, (1991 Jul) 195 (1) 177-82.
Journal code: EPB. ISSN: 0014-4827.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9110

L2 ANSWER 153 OF 299 MEDLINE
AN 91275738 MEDLINE
TI [The effect of insulin on thrombocytopoiesis and thrombocytopoietin biosynthesis in rats].
Vliianie insulina vurkhu trombotsitopoezata i biosintezata na trombotsitopoetin u plukhove.
AU Negrev N
SO EKSPERIMENTALNA MEDITSINA I MORFOLOGIIA, (1990) 29 (4) 24-7.
Journal code: EEB. ISSN: 0367-0643.
CY Bulgaria
DT Journal; Article; (JOURNAL ARTICLE)
LA Bulgarian
EM 9110

L2 ANSWER 154 OF 299 MEDLINE
AN 91217373 MEDLINE
TI Thyroid peroxidase in endemic goiter tissue.
AU Sugawara M; Summer C N; Kobayashi A; Murakami S; Kuma K; Medeiros-Neto G A
CS Endocrine Division, Wadsworth Veterans Administration Hospital, Los Angeles, California 90073..
SO JOURNAL OF ENDOCRINOLOGICAL INVESTIGATION, (1990 Dec) 13 (11) 893-9.
Journal code: IAM. ISSN: 0391-4097.
CY Italy
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9108

L2 ANSWER 155 OF 299 MEDLINE
AN 91209193 MEDLINE
TI In vitro and in vivo murine metabolism of spirogermanium.
AU Garteiz D; Siddik Z H; Newman R A
CS TexMS Services Inc., Houston, TX..
SO DRUG METABOLISM AND DISPOSITION, (1991 Jan-Feb) 19 (1) 44-7.
Journal code: EBR. ISSN: 0090-9556.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9108

L2 ANSWER 156 OF 299 MEDLINE
AN 91199568 MEDLINE
TI Tryptophan 2,3-dioxygenase activity in turkey poults infected with Bordetella avium.
AU Yersin A G; Edens F W; Simmons D G
CS North Carolina State University, Department of Poultry Science, Raleigh 27695-7635..
SO COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY. B: COMPARATIVE
BIOCHEMISTRY, (1990) 97 (4) 755-9.
Journal code: DNV. ISSN: 0305-0491.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals

EM 9107

L2 ANSWER 157 OF 299 MEDLINE
AN 91185623 MEDLINE
TI Thrombospondin-induced adhesion of human platelets.
AU Tuszynski G P; Kowalska M A
CS Department of Medicine, Medical College of Pennsylvania, Philadelphia 19129..
NC HL-28149 (NHLBI)
SO JOURNAL OF CLINICAL INVESTIGATION, (1991 Apr) 87 (4) 1387-94.
Journal code: HS7. ISSN: 0021-9738.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9107

L2 ANSWER 158 OF 299 MEDLINE
AN 91170014 MEDLINE
TI The net portal and hepatic flux of metabolites and oxygen consumption in growing beef steers given postruminal casein.
AU Guerino F; Huntington G B; Erdman R A
CS Dept. of Anim. Sci., University of Maryland, College Park 20742..
SO JOURNAL OF ANIMAL SCIENCE, (1991 Jan) 69 (1) 387-95.
Journal code: HC7. ISSN: 0021-8812.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9106

L2 ANSWER 159 OF 299 MEDLINE
AN 91170013 MEDLINE
TI The effects of abomasal casein infusions in growing beef steers on portal and hepatic flux of pancreatic hormones and arterial concentrations of somatomedin-C.
AU Guerino F; Huntington G B; Erdman R A; Elsasser T H; Reynolds C K
CS Dept. of Anim. Sci., University of Maryland, College Park 20742..
SO JOURNAL OF ANIMAL SCIENCE, (1991 Jan) 69 (1) 379-86.
Journal code: HC7. ISSN: 0021-8812.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9106

L2 ANSWER 160 OF 299 MEDLINE
AN 91159898 MEDLINE
TI Change of circulating thyroid autoantibody titers in Graves' hyperthyroidism after antithyroid drugs ***therapy*** .
AU Lin H D; Tai F T; Chen H D; Lee S P; Chang F Y; Wang G G; Tang K T; Lee J K
CS Department of Medicine, Veterans General Hospital-Taipei, R.O.C..
SO CHUNG-HUA I HSUEH TSA CHIH [CHINESE MEDICAL JOURNAL], (1991 Feb) 47
(2) 86-90.
Journal code: CHQ. ISSN: 0578-1337.
CY TAIWAN: Taiwan, Province of China
DT Journal; Article; (JOURNAL ARTICLE)
LA English
EM 9106

L2 ANSWER 161 OF 299 MEDLINE
AN 91151359 MEDLINE
TI CD36-mediated signal transduction in human monocytes by anti-CD36 antibodies but not by anti-thrombospondin antibodies recognizing cell membrane-bound thrombospondin.
AU Schuepp B J; Pfister H; Clemetson K J; Silverstein R L; Jungi T W
CS Institute of Veterinary Virology, University of Berne, Switzerland..
NC ROI-HL42540 (NHLBI)
SO BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1991 Feb 28)
175 (1) 263-70.
Journal code: 9Y8. ISSN: 0006-291X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9106

L2 ANSWER 162 OF 299 MEDLINE
AN 91134783 MEDLINE
TI Murine susceptibility to organophosphorus-induced delayed neuropathy (OPIDN).
AU Veronesi B; Padilla S; Blackmon K; Pope C
CS U.S. Environmental Protection Agency, Health Effects Research Laboratory, Research Triangle Park, North Carolina 27711..
SO TOXICOLOGY AND APPLIED PHARMACOLOGY, (1991 Feb) 107 (2) 311-24.
Journal code: VWO. ISSN: 0041-008X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9105

L2 ANSWER 163 OF 299 MEDLINE
AN 91129325 MEDLINE
TI Comparative effects of ***thrombopoietin*** and interleukin-6 on murine megakaryocytopoiesis and platelet production.
AU McDonald T P; Cottrell M B; Swearingen C J; Clift R E
CS Department of Animal Science, University of Tennessee, College of Veterinary Medicine, Knoxville 37901-1071..
NC HL 14637 (NHLBI)
SO BLOOD, (1991 Feb 15) 77 (4) 735-40.
Journal code: A8G. ISSN: 0006-4971.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9105

L2 ANSWER 164 OF 299 MEDLINE
AN 91125981 MEDLINE
TI [Study of the thrombolytic and fibrinolytic properties of thiol-dependent serine proteinase (***TSP***) from Thermoactinomyces vulgaris in vivo].
Izuchenie tromboliticheskikh i fibrinoliticheskikh svoistv preparata tiolzavisimoi serinovoi proteinazy (***TSP***) iz Termoactinomyces vulgaris v usloviiakh in vivo.
AU Liutova L V; Andreenko G V; Karabasova M A; Tsaplina I A; Rudenskaia G N
SO PRIKLADNAIA BIOKHIMIIA I MIKROBIOLOGIIA, (1990 Sep-Oct) 26 (5) 623-8.
Journal code: PM5. ISSN: 0555-1099.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 9105

L2 ANSWER 165 OF 299 MEDLINE
AN 91088093 MEDLINE
TI Tropical spastic paraparesis-like illness occurring in a patient dually infected with HIV-1 and HTLV-II.
AU Berger J R; Svenningsson A; Raffanti S; Resnick L
CS Department of Neurology, University of Miami School of Medicine, FL 33136..
NC P01 NS 25569-01 (NINDS)
SO NEUROLOGY, (1991 Jan) 41 (1) 85-7.
Journal code: NZ0. ISSN: 0028-3878.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 9104

L2 ANSWER 166 OF 299 MEDLINE
AN 91031316 MEDLINE
TI Changes in serum autoantibodies to thyroid peroxidase during antithyroid drug ***therapy*** for Graves' disease.
AU Takamatsu J; Hosoya T; Kohno Y; Naito N; Sakane S; Takeda K; Kuma K;
Ohsawa N
CS First Department of Medicine, Osaka Medical College, Takatsuki, Japan..
SO ENDOCRINOLOGIA JAPONICA, (1990 Apr) 37 (2) 275-83.
Journal code: EG5. ISSN: 0013-7219.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals

EM 9102

L2 ANSWER 167 OF 299 MEDLINE
AN 91018181 MEDLINE
TI Haemopoietic growth factors.
AU Devereux S; Linch D
CS Kent and Canterbury General Hospital..
SO QUARTERLY JOURNAL OF MEDICINE, (1990 Jun) 75 (278) 537-50.
Ref: 73
Journal code: QKZ. ISSN: 0033-5622.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 9101

L2 ANSWER 168 OF 299 MEDLINE
AN 91013856 MEDLINE
TI Radical splenopancreatectomy with duodenal loop conservation in rats.
AU Wenger J M; Meyer P; Morel D R; Costabella P M; Rohner A
CS Department of Surgery, University Hospital of Geneva, Switzerland..
SO JOURNAL OF SURGICAL RESEARCH, (1990 Oct) 49 (4) 361-5.
Journal code: K7B. ISSN: 0022-4804.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9101

L2 ANSWER 169 OF 299 MEDLINE
AN 91002903 MEDLINE
TI In vivo stimulation of megakaryocytopoiesis by recombinant murine granulocyte-macrophage colony-stimulating factor.
AU Vannucchi A M; Grossi A; Rafanelli D; Ferrini P R
CS Division of Hematology, University of Florence-USL 10/D, Italy..
SO BLOOD, (1990 Oct 15) 76 (8) 1473-80.
Journal code: A8G. ISSN: 0006-4971.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals

EM 9101

L2 ANSWER 170 OF 299 MEDLINE
AN 90369208 MEDLINE
TI Simultaneous assay for megakaryocyte colony-stimulating factor and megakaryocyte potentiator and its application.
AU Satoh K; Nagasawa T; Abe T
CS Institute of Clinical Medicine, University of Tsukuba, Ibaraki, Japan..
SO JOURNAL OF LABORATORY AND CLINICAL MEDICINE, (1990 Aug) 116 (2)
162-71.
Journal code: IVR. ISSN: 0022-2143.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 9012

L2 ANSWER 171 OF 299 MEDLINE
AN 90368871 MEDLINE
TI Antithyroid peroxidase autoantibodies in thyroid diseases.
AU Mariotti S; Caturegli P; Piccolo P; Barbesino G; Pinchera A
CS Istituto di Endocrinologia, Universit`a di Pisa, Italy..
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1990 Sep) 71 (3)
661-9.
Journal code: HRB. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9012

L2 ANSWER 172 OF 299 MEDLINE
AN 90366174 MEDLINE
TI The therapeutic potential of interleukin-1 beta in the ***treatment*** of chemotherapy- or radiation-induced myelosuppression and in tumor ***therapy*** .
AU Nakai S; Hirai Y
CS Cellular Technology Institute, Otsuka Pharmaceutical Co., Ltd., Tokushima, Japan..
SO BIOTHERAPY, (1989) 1 (4) 339-54.
Journal code: AU3. ISSN: 0921-299X.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9012

L2 ANSWER 173 OF 299 MEDLINE
AN 90351497 MEDLINE
TI In vivo evidence that insulin does not inhibit hepatic tryptophan pyrrolase activity in rats.
AU Broqua P; Baudrie V; Laude D; Guezennec Y; Chaouloff F
CS Laboratoire de Pharmacologie, INSERM U7, CHU Necker - E.M., Paris, France..
SO BIOCHEMICAL PHARMACOLOGY, (1990 Aug 15) 40 (4) 759-63.
Journal code: 9Z4. ISSN: 0006-2952.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9011

L2 ANSWER 174 OF 299 MEDLINE
AN 90336698 MEDLINE
TI ***Thrombopoietin*** derived from human embryonic kidney cells stimulates an increase in DNA content of murine megakaryocytes in vivo.
AU McDonald T P; Jackson C W
CS University of Tennessee College of Veterinary Medicine, Knoxville 37901-1071..
NC HL14637 (NHLBI)
HL31598 (NHLBI)
CA21765 (NCI)
+
SO EXPERIMENTAL HEMATOLOGY, (1990 Aug) 18 (7) 758-63.
Journal code: EPR. ISSN: 0301-472X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9011

L2 ANSWER 175 OF 299 MEDLINE
AN 90324560 MEDLINE
TI Human T-cell lymphotropic virus-type I.
AU Larkin J; Sinnott J T 4th; Weiss J; Holt D A
CS Department of Internal Medicine, University of South Florida, College of Medicine, Tampa..
SO INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY, (1990 Jun) 11 (6)
314-8. Ref: 68
Journal code: ICH. ISSN: 0899-823X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals; Nursing Journals
EM 9011

L2 ANSWER 176 OF 299 MEDLINE
AN 90311373 MEDLINE
TI Transactivation of interleukin 2 and its receptor induces immune activation in human T-cell lymphotropic virus type I-associated myelopathy: pathogenic implications and a rationale for immunotherapy.
AU Tendler C L; Greenberg S J; Blattner W A; Manns A; Murphy E; Fleisher T; Hanchard B; Morgan O; Burton J D; Nelson D L; et al
CS Metabolism Branche, National Cancer Institute, National Institutes of Health, Bethesda, MD 20892..
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES
OF AMERICA, (1990 Jul) 87 (13) 5218-22.
Journal code: PV3. ISSN: 0027-8424.

CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9010

L2 ANSWER 177 OF 299 MEDLINE
AN 90287889 MEDLINE
TI Acetylsalicylic acid stimulates murine megakaryocyte precursor cells.
AU Sullivan P S; McDonald T P
CS Department of Animal Science, College of Veterinary Medicine, University of Tennessee, Knoxville 37901-1071..
NC HL 14637 (NHLBI)
SO PROCEEDINGS OF THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE,
(1990 Jul) 194 (3) 216-20.
Journal code: PXZ. ISSN: 0037-9727.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9009

L2 ANSWER 178 OF 299 MEDLINE
AN 90269610 MEDLINE
TI Regulation of human glutathione S-transferase pi gene transcription: influence of 5'-flanking sequences and trans-activating factors which recognize AP-1-binding sites.
AU Morrow C S; Goldsmith M E; Cowan K H
CS Medicine Branch, National Cancer Institute, Bethesda, MD 20892..
SO GENE, (1990 Apr 16) 88 (2) 215-25.
Journal code: FOP. ISSN: 0378-1119.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-M37065
EM 9009

L2 ANSWER 179 OF 299 MEDLINE
AN 90257905 MEDLINE
TI Essential thrombocythemia in a cat.
AU Hammer A S; Couto C G; Getzy D; Bailey M Q
CS Department of Veterinary Clinical Sciences, College of Veterinary Medicine, Ohio State University, Columbus..
SO JOURNAL OF VETERINARY INTERNAL MEDICINE, (1990 Mar-Apr) 4 (2) 87-91.
Journal code: JVG. ISSN: 0891-6640.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9008

L2 ANSWER 180 OF 299 MEDLINE
AN 90225800 MEDLINE
TI Purification and characterization of a large, tryptic fragment of human thyroid peroxidase with high catalytic activity.
AU Taurog A; Dorris M L; Yokoyama N; Slaughter C
CS Department of Pharmacology, University of Texas Southwestern Medical Center, Dallas 75235..
NC DK-03812 (NIDDK)
SO ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1990 May 1) 278 (2)
333-41.
Journal code: 6SK. ISSN: 0003-9861.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9007

L2 ANSWER 181 OF 299 MEDLINE
AN 90203233 MEDLINE
TI Stimulation of thrombopoiesis in mice by human recombinant interleukin 6.
AU Hill R J; Warren M K; Levin J
CS Department of Laboratory Medicine, University of California School of Medicine, San Francisco..
SO JOURNAL OF CLINICAL INVESTIGATION, (1990 Apr) 85 (4) 1242-7.
Journal code: HS7. ISSN: 0021-9738.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 9007

L2 ANSWER 182 OF 299 MEDLINE
AN 90184648 MEDLINE
TI Thrombospondin binding by keratinocytes: modulation under conditions which alter thrombospondin biosynthesis.
AU Riser B L; Varani J; Nickoloff B J; Mitra R S; Dixit V M
CS Department of Pathology, University of Michigan Medical School, Ann Arbor..
NC AM53590 (NIADDK)
SO DERMATOLOGICA, (1990) 180 (2) 60-5.
Journal code: E3D. ISSN: 0011-9075.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9006

L2 ANSWER 183 OF 299 MEDLINE
AN 90127083 MEDLINE
TI The effect of heparin on fibronectin and thrombospondin synthesis and mRNA levels in cultured human endothelial cells.
AU Lyons-Giordano B; Brinker J M; Kefalides N A
CS Connective Tissue Research Institute, University of Pennsylvania, Philadelphia 19104..
NC AR-20553 (NIAMS)
HL-29492 (NHLBI)
HL-07502 (NHLBI)
SO EXPERIMENTAL CELL RESEARCH, (1990 Jan) 186 (1) 39-46.
Journal code: EPB. ISSN: 0014-4827.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9005

L2 ANSWER 184 OF 299 MEDLINE
AN 90090206 MEDLINE
TI Experimental study on the antigoiter effect of high casein nutrition.
AU Yu B
SO CHUNG-HUA I HSUEH TSA CHIH [CHINESE MEDICAL JOURNAL], (1989 Jul) 69
(7) 378-81, 28.
Journal code: CDG. ISSN: 0376-2491.
CY China
DT Journal; Article; (JOURNAL ARTICLE)
LA Chinese
EM 9004

L2 ANSWER 185 OF 299 MEDLINE
AN 90080013 MEDLINE
TI Effect of beta-naphthoflavone on o-tolyl saligenin phosphate-induced delayed neuropathy in two lines of chickens.
AU Bursian S J; Lehning E J; Correll L; Ehrich M
CS Department of Animal Science, Michigan State University, East Lansing 48824..
NC E503384
SO JOURNAL OF TOXICOLOGY AND ENVIRONMENTAL HEALTH, (1989) 28 (4)
461-71.
Journal code: KAA. ISSN: 0098-4108.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9003

L2 ANSWER 186 OF 299 MEDLINE
AN 90073581 MEDLINE
TI Developmentally regulated expression of a 78 kDa erythroblast membrane glycoprotein immunologically related to the platelet thrombospondin receptor.
AU Kieffer N; Bettaieb A; Legrand C; Coulombel L; Vainchenker W; Edelman L; Breton-Gorius J
CS INSERM U91/CNRS UA 607, Hopital Henri Mondor, Creteil, France..

SO BIOCHEMICAL JOURNAL, (1989 Sep 15) 262 (3) 835-42.
Journal code: 9YO. ISSN: 0264-6021.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Cancer Journals; Priority Journals
EM 9003

L2 ANSWER 187 OF 299 MEDLINE
AN 90060281 MEDLINE
TI Effects of thrombocytopoiesis-stimulating factor on terminal cytoplasmic maturation of human megakaryocytes.
AU Straneva J E; Briddell R A; McDonald T P; Yang H H; Hoffman R
CS Department of Medicine, Indiana University School of Medicine, Indianapolis..
NC RO1 CA34841-07
HL14637
SO EXPERIMENTAL HEMATOLOGY, (1989 Dec) 17 (11) 1122-7.
Journal code: EPR. ISSN: 0301-472X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9003

L2 ANSWER 188 OF 299 MEDLINE
AN 90056416 MEDLINE
TI Improved assay method for activity of thyroid peroxidase-catalysed coupling of iodotyrosine residues of thyroglobulin utilizing h.p.l.c. for analysis of iodothyronines [published errata appear in Biochem J 1990 Feb 1;265(6):931 and 1990 Jun 15;268(3):807].
AU Ohmori T; Tarutani O; Hosoya T
CS FAculty of Pharmaceutical Sciences, Chiba University, Japan..
SO BIOCHEMICAL JOURNAL, (1989 Aug 15) 262 (1) 209-14.
Journal code: 9YO. ISSN: 0264-6021.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9002

L2 ANSWER 189 OF 299 MEDLINE
AN 89385881 MEDLINE
TI Effects of peripheral chemo- and baro-receptor denervation on responses of preoptic thermosensitive neurons to inspired CO2.
AU Tamaki Y; Nakayama T; Kanosue K
CS Department of Physiology, Osaka University Medical School, Japan..
SO PFLUGERS ARCHIV. EUROPEAN JOURNAL OF PHYSIOLOGY, (1989 Sep) 414 (5)
495-9.
Journal code: OZX. ISSN: 0031-6768.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8912

L2 ANSWER 190 OF 299 MEDLINE
AN 89381459 MEDLINE
TI All-trans retinoic acid stimulates growth of adult human keratinocytes cultured in growth factor-deficient medium, inhibits production of thrombospondin and fibronectin, and reduces adhesion.
AU Varani J; Nickoloff B J; Dixit V M; Mitra R S; Voorhees J J
CS Department of Pathology, University of Michigan Medical School, Ann Arbor 48109-0602..
SO JOURNAL OF INVESTIGATIVE DERMATOLOGY, (1989 Oct) 93 (4) 449-54.
Journal code: IHZ. ISSN: 0022-202X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8912

L2 ANSWER 191 OF 299 MEDLINE
AN 89364024 MEDLINE
TI Interleukin-1 potentiates granulopoiesis and thrombopoiesis by producing hematopoietic factors in vivo.
AU Nakai S; Aihara K; Hirai Y
CS Cellular Technology Institute, Otsuka Pharmaceutical Co., Ltd., Tokushima, Japan..
SO LIFE SCIENCES, (1989) 45 (7) 585-91.
Journal code: L62. ISSN: 0024-3205.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8912

L2 ANSWER 192 OF 299 MEDLINE
AN 89359689 MEDLINE
TI Use of thermospray liquid chromatography-mass spectrometry for characterization of reactive metabolites of 3'-hydroxyacetanilide, a non-hepatotoxic regioisomer of acetaminophen.
AU Rashed M S; Nelson S D
CS Department of Medicinal Chemistry, University of Washington, Seattle 98195..
NC GM25418
SO JOURNAL OF CHROMATOGRAPHY, (1989 Jul 14) 474 (1) 209-22.
Journal code: HQF. ISSN: 0021-9673.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8912

L2 ANSWER 193 OF 299 MEDLINE
AN 89359521 MEDLINE
TI Thrombospondin modulates focal adhesions in endothelial cells.
AU Murphy-Ullrich J E; Hook M
CS Department of Biochemistry, University of Alabama, Birmingham 35294..
NC AM27807
HL 34343
SO JOURNAL OF CELL BIOLOGY, (1989 Sep) 109 (3) 1309-19.
Journal code: HMV. ISSN: 0021-9525.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8912

L2 ANSWER 194 OF 299 MEDLINE
AN 89352860 MEDLINE
TI Interleukin-6 is a potent thrombopoietic factor in vivo in mice.
AU Ishibashi T; Kimura H; Shikama Y; Uchida T; Kariyone S; Hirano T; Kishimoto T; Takatsuki F; Akiyama Y
CS First Department of Internal Medicine, Fukushima Medical College, Japan..
SO BLOOD, (1989 Sep) 74 (4) 1241-4.
Journal code: A8G. ISSN: 0006-4971.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 8912

L2 ANSWER 195 OF 299 MEDLINE
AN 89346769 MEDLINE
TI Current status of immunoscintigraphy in the detection of thrombosis and thromboembolism.
AU Koblik P D; De Nardo G L; Berger H J
CS Department of Radiological Sciences, School of Veterinary Medicine, University of California-Davis 95616..
SO SEMINARS IN NUCLEAR MEDICINE, (1989 Jul) 19 (3) 221-37. Ref: 113
Journal code: UNY. ISSN: 0001-2998.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 8911

L2 ANSWER 196 OF 299 MEDLINE
AN 89327441 MEDLINE
TI Interferon-gamma inhibits thyrotropin-induced thyroidal peroxidase gene expression in cultured human thyrocytes.
AU Ashizawa K; Yamashita S; Nagayama Y; Kimura H; Hirayu H; Izumi M; Nagataki S
CS First Department of Internal Medicine, Nagasaki University School of Medicine, Japan..

SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1989 Aug) 69 (2)
475-7.
Journal code: HRB. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM 8911

L2 ANSWER 197 OF 299 MEDLINE
AN 89278788 MEDLINE
TI The regulation of megakaryocyte and platelet production.
AU McDonald T P
CS University of Tennessee College of Veterinary Medicine, Knoxville 37901-1071..
NC HL 14637
SO INTERNATIONAL JOURNAL OF CELL CLONING, (1989 May) 7 (3) 139-55.
Ref: 130
Journal code: IJC. ISSN: 0737-1454.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 8909

L2 ANSWER 198 OF 299 MEDLINE
AN 89211056 MEDLINE
TI Granzyme A expression by normal rat natural killer (NK) cells in vivo and by interleukin 2-activated NK cells in vitro.
AU Velotti F; Palmieri G; Morrone S; Piccoli M; Frati L; Santoni A
CS Department of Experimental Medicine, University La Sapienza, Rome, Italy..
SO EUROPEAN JOURNAL OF IMMUNOLOGY, (1989 Mar) 19 (3) 575-8.
Journal code: EN5. ISSN: 0014-2980.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8908

L2 ANSWER 199 OF 299 MEDLINE
AN 89198477 MEDLINE
TI Differential effects of methylmercuric chloride and mercuric chloride on the histochemistry of rat thyroid peroxidase and the thyroid peroxidase activity of isolated pig thyroid cells.
AU Nishida M; Muraoka K; Nishikawa K; Takagi T; Kawada J
CS Faculty of Pharmaceutical Sciences, University of Tokushima, Japan..
SO JOURNAL OF HISTOCHEMISTRY AND CYTOCHEMISTRY, (1989 May) 37 (5)
723-7.
Journal code: IDZ. ISSN: 0022-1554.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals

EM 8907

L2 ANSWER 200 OF 299 MEDLINE
AN 89197416 MEDLINE
TI The relative importance of Ah versus H-2 genotype on Trichinella resistance following exposure to 3-methylcholanthrene.
AU Johnson B E; Dietert R R; Wassom D L
CS Department of Poultry and Avian Science, New York State College of Agriculture, Cornell University, Ithaca 14853..
NC AI-17079
ES07052
SO INTERNATIONAL JOURNAL OF IMMUNOPHARMACOLOGY, (1989) 11 (2) 217-27.
Journal code: GRI. ISSN: 0192-0561.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 8907

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